



MS510 and MS610 Series

User's Guide

Important: Click [here](#) before using this guide.

May 2013

www.lexmark.com

Machine type(s):

4514

Model(s):

630, 635, 646

Contents

Safety information.....	6
Overview.....	8
Using this guide.....	8
Finding information about the printer.....	8
Selecting a location for the printer.....	10
Additional printer setup.....	12
Installing internal options.....	12
Available internal options.....	12
Accessing the controller board	12
Installing an optional card	12
Installing a memory card	14
Installing an Internal Solutions Port.....	16
Installing a printer hard disk	23
Removing a printer hard disk.....	25
Installing hardware options.....	26
Installing optional trays	26
Setting up the printer software.....	28
Installing the printer software	28
Updating available options in the printer driver	29
Networking.....	30
Preparing to set up the printer on an Ethernet network.....	30
Installing the printer on an Ethernet network	30
Preparing to set up the printer on a wireless network.....	32
Connecting the printer using the Wireless Setup Wizard.....	33
Connecting the printer to a wireless network using the Wi-Fi Protected Setup	34
Connecting the printer to a wireless network using the Embedded Web Server.....	34
Verifying printer setup.....	35
Using MS510dn and MS610dn.....	36
Learning about the printer.....	36
Printer configurations	36
Using the printer control panel.....	37
Understanding the colors of the Sleep button and indicator lights.....	38
Attaching cables.....	39
Accessing the controller board	40
Loading paper and specialty media.....	41

Setting the paper size and type	41
Configuring Universal paper settings.....	41
Using the standard bin and paper stop	41
Loading trays.....	42
Loading the multipurpose feeder	46
Linking and unlinking trays	50
Printing.....	52
Printing a document	52
Printing from a flash drive or mobile device.....	53
Printing confidential and other held jobs	55
Printing information pages	56
Canceling a print job	57
Managing the printer.....	58
Finding advanced networking and administrator information.....	58
Checking the virtual display	58
Configuring supply notifications from the Embedded Web Server	58
Modifying confidential print settings.....	59
Copying printer settings to other printers	59
Creating a printer control panel PIN	60
Printing a menu settings page	60
Printing a network setup page.....	61
Checking the status of parts and supplies	61
Saving energy.....	61
Restoring factory default settings.....	65
Securing the printer	66
Using MS610de.....	68
Learning about the printer.....	68
Printer configurations	68
Using the printer control panel.....	69
Understanding the colors of the Sleep button and indicator lights.....	69
Understanding the home screen	70
Using the touch-screen buttons	71
Attaching cables.....	72
Accessing the controller board	74
Setting up and using the home screen applications.....	76
Finding the IP address of the computer.....	76
Finding the IP address of the printer	77
Accessing the Embedded Web Server	77
Customizing the home screen	77
Activating the home screen applications.....	78
Setting up Remote Operator Panel.....	79
Exporting and importing a configuration.....	79

Loading paper and specialty media.....	80
Setting the paper size and type	80
Configuring Universal paper settings.....	80
Using the standard bin and paper stop	81
Loading trays.....	81
Loading the multipurpose feeder	86
Linking and unlinking trays	89
Printing.....	91
Printing forms	91
Printing a document	91
Printing from a flash drive or mobile device.....	93
Printing confidential and other held jobs	95
Printing information pages	96
Canceling a print job	97
Managing the printer.....	97
Setting up serial printing.....	97
Changing port settings after installing a new network Internal Solutions Port.....	99
Finding advanced networking and administrator information.....	101
Checking the virtual display	101
Configuring supply notifications from the Embedded Web Server	101
Modifying confidential print settings.....	102
Copying printer settings to other printers	102
Creating a printer control panel PIN.....	103
Printing a menu settings page	103
Printing a network setup page.....	104
Checking the status of parts and supplies	104
Saving energy.....	104
Restoring factory default settings.....	109
Securing the printer	109
Paper and specialty media guide.....	114
Using specialty media.....	114
Paper guidelines.....	116
Supported paper sizes, types, and weights.....	119
Understanding the printer menus.....	122
Menus list.....	122
Paper menu.....	123
Reports menu.....	131
Network/Ports menu.....	132
Security menu.....	143
Settings menu.....	147

Help menu.....	168
Saving money and the environment.....	170
Saving paper and toner.....	170
Recycling.....	170
Maintaining the printer.....	172
Cleaning the printer.....	172
Ordering parts and supplies.....	172
Estimated number of remaining pages.....	175
Storing supplies.....	175
Replacing supplies.....	175
Moving the printer.....	179
Clearing jams.....	181
Avoiding jams.....	181
Understanding jam messages and locations.....	182
[x]-page jam, open front door. [20y.xx].....	184
[x]-page jam, open rear door. [20y.xx].....	187
[x]-page jam, clear standard bin. [20y.xx].....	188
[x]-page jam, remove tray 1 to clear duplex. [23y.xx].....	189
[x]-page jam, open tray [x]. [24y.xx].....	190
[x]-page jam, clear manual feeder. [25y.xx].....	191
Troubleshooting.....	193
Understanding the printer messages.....	193
Solving printer problems.....	205
Solving print problems.....	211
Solving home screen applications problems.....	236
Embedded Web Server does not open.....	236
Contacting customer support.....	238
Notices.....	239
Product information.....	239
Edition notice.....	239
Power consumption.....	244
Index.....	253

Safety information

Connect the power cord to a properly grounded electrical outlet that is near the product and easily accessible.

Do not place or use this product near water or wet locations.

 **CAUTION—POTENTIAL INJURY:** This product uses a laser. Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

This product uses a printing process that heats the print media, and the heat may cause the media to release emissions. You must understand the section in your operating instructions that discusses the guidelines for selecting print media to avoid the possibility of harmful emissions.

 **CAUTION—POTENTIAL INJURY:** The lithium battery in this product is not intended to be replaced. There is a danger of explosion if a lithium battery is incorrectly replaced. Do not recharge, disassemble, or incinerate a lithium battery. Discard used lithium batteries according to the manufacturer's instructions and local regulations.

 **CAUTION—POTENTIAL INJURY:** Before moving the printer, follow these guidelines to avoid personal injury or printer damage:

- Turn the printer off using the power switch, and then unplug the power cord from the electrical outlet.
- Disconnect all cords and cables from the printer before moving it.
- If an optional tray is installed, then remove it from the printer. To remove the optional tray, slide the latch on the right side of the tray toward the front of the tray until it *clicks* into place.
- Use the handholds located on both sides of the printer to lift it.
- Make sure your fingers are not under the printer when you set it down.
- Before setting up the printer, make sure there is adequate clearance around it.

Use only the power cord provided with this product or the manufacturer's authorized replacement.

 **CAUTION—HOT SURFACE:** The inside of the printer might be hot. To reduce the risk of injury from a hot component, allow the surface to cool before touching.

 **CAUTION—SHOCK HAZARD:** If you are accessing the controller board or installing optional hardware or memory devices sometime after setting up the printer, then turn the printer off, and unplug the power cord from the electrical outlet before continuing. If you have any other devices attached to the printer, then turn them off as well, and unplug any cables going into the printer.

 **CAUTION—SHOCK HAZARD:** Make sure that all external connections (such as Ethernet and telephone system connections) are properly installed in their marked plug-in ports.

This product is designed, tested, and approved to meet strict global safety standards with the use of specific manufacturer's components. The safety features of some parts may not always be obvious. The manufacturer is not responsible for the use of other replacement parts.

 **CAUTION—POTENTIAL INJURY:** Do not cut, twist, bind, crush, or place heavy objects on the power cord. Do not subject the power cord to abrasion or stress. Do not pinch the power cord between objects such as furniture and walls. If any of these things happen, a risk of fire or electrical shock results. Inspect the power cord regularly for signs of such problems. Remove the power cord from the electrical outlet before inspecting it.

Refer service or repairs, other than those described in the user documentation, to a service representative.

 **CAUTION—SHOCK HAZARD:** To avoid the risk of electrical shock when cleaning the exterior of the printer, unplug the power cord from the electrical outlet and disconnect all cables from the printer before proceeding.

 **CAUTION—POTENTIAL INJURY:** To reduce the risk of equipment instability, load each tray separately. Keep all other trays closed until needed.

 **CAUTION—SHOCK HAZARD:** Do not set up this product or make any electrical or cabling connections, such as the fax feature, power cord, or telephone, during a lightning storm.

SAVE THESE INSTRUCTIONS.

Overview

Using this guide

This *User's Guide* provides general and specific information on using the printer models that are listed on the cover page.

The following chapters contain information applicable to all printer models:

- **Selecting a location for the printer**
- **Additional printer setup**
- **Paper and specialty media guide**
- **Understanding printer menus**
- **Saving money and the environment**
- **Maintaining the printer**
- **Clearing jams**
- **Troubleshooting**

To find instructions for your printer:

- Use the table of contents.
- Use the Search function or the Find toolbar of your application to search for page content.

Finding information about the printer

What are you looking for?	Find it here
Initial setup instructions: <ul style="list-style-type: none">• Connecting the printer• Installing the printer software	Setup documentation—The setup documentation came with the printer and is also available at http://support.lexmark.com .
Additional setup and instructions for using the printer: <ul style="list-style-type: none">• Selecting and storing paper and specialty media• Loading paper• Configuring printer settings• Viewing and printing documents and photos• Setting up and using the printer software• Configuring the printer on a network• Caring for and maintaining the printer• Troubleshooting and solving problems	<i>User's Guide</i> and <i>Quick Reference Guide</i> —The guides may be available on the <i>Software and Documentation</i> CD. For more information, visit http://support.lexmark.com .
Instructions for: <ul style="list-style-type: none">• Connecting the printer to an Ethernet network• Troubleshooting printer connection problems	<i>Networking Guide</i> —Open the <i>Software and Documentation</i> CD, and then navigate to: Documentation > User's Guide and other publications > Networking Guide

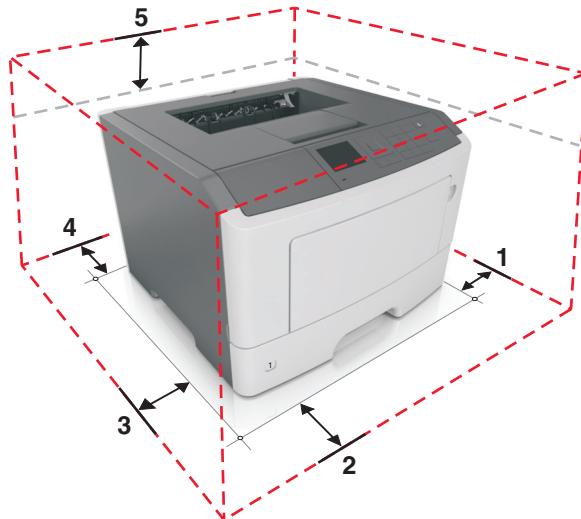
What are you looking for?	Find it here
Help using the printer software	<p>Windows or Mac Help—Open a printer software program or application, and then click Help.</p> <p>Click  to view context-sensitive information.</p> <p>Notes:</p> <ul style="list-style-type: none">• Help is automatically installed with the printer software.• The printer software is located in the printer program folder or on the desktop, depending on your operating system.
The latest supplemental information, updates, and customer support: <ul style="list-style-type: none">• Documentation• Driver downloads• Live chat support• E-mail support• Voice support	<p>Lexmark support Web site— http://support.lexmark.com</p> <p>Note: Select your country or region, and then select your product to view the appropriate support site.</p> <p>Support telephone numbers and hours of operation for your country or region can be found on the support Web site or on the printed warranty that came with your printer.</p> <p>Record the following information (located on the store receipt and at the back of the printer), and have it ready when you contact customer support so that they may serve you faster:</p> <ul style="list-style-type: none">• Machine Type number• Serial number• Date purchased• Store where purchased
Warranty information	<p>Warranty information varies by country or region:</p> <ul style="list-style-type: none">• In the U.S.—See the Statement of Limited Warranty included with this printer, or at http://support.lexmark.com.• In other countries and regions—See the printed warranty that came with your printer.

Selecting a location for the printer

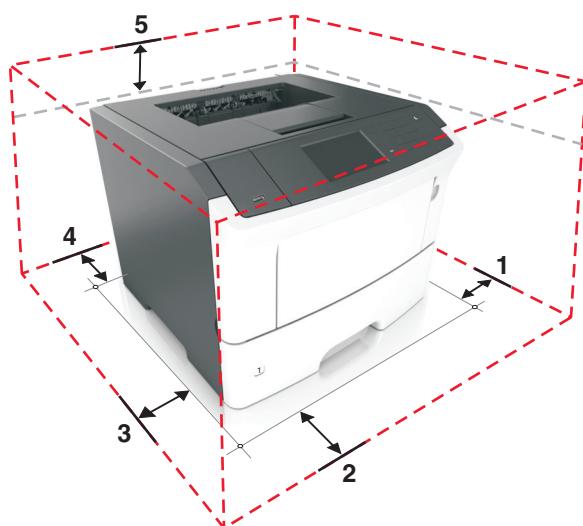
When selecting a location for the printer, leave enough room to open trays, covers, and doors. If you plan to install any options, then leave enough room for them also. It is important to:

- Set up the printer near a properly grounded and easily accessible electrical outlet.
- Make sure airflow in the room meets the latest revision of the ASHRAE 62 standard or the CEN Technical Committee 156 standard.
- Provide a flat, sturdy, and stable surface.
- Keep the printer:
 - Clean, dry, and free of dust.
 - Away from stray staples and paper clips.
 - Away from the direct airflow of air conditioners, heaters, or ventilators.
 - Free from direct sunlight and humidity extremes.
- Observe the recommended temperatures and avoid fluctuations.

Ambient temperature	15.6 to 32.2°C (60 to 90°F)
Storage temperature	1 to 35°C (34 to 95°F)



1	Right side	30 cm (12 in.)
2	Front	51 cm (20 in.)
3	Left side	20 cm (8 in.)
4	Rear	20 cm (8 in.)
5	Top	30 cm (12 in.)



1	Right side	30 cm (12 in.)
2	Front	51 cm (20 in.)
3	Left side	20 cm (8 in.)
4	Rear	20 cm (8 in.)
5	Top	30 cm (12 in.)

Additional printer setup

Installing internal options

 **CAUTION—SHOCK HAZARD:** If you are accessing the controller board or installing optional hardware or memory devices sometime after setting up the printer, then turn the printer off, and unplug the power cord from the electrical outlet before continuing. If you have other devices attached to the printer, then turn them off as well, and unplug any cables going into the printer.

Warning—Potential Damage: Controller board electronic components are easily damaged by static electricity. Touch a metal surface on the printer before touching any controller board electronic components or connectors.

Available internal options

- DDR3 DIMM
- Flash memory
 - Fonts
 - Firmware
 - Forms Barcode
 - Prescribe
 - IPDS
 - PrintCrypton
- Hard disk*
- Internal Solutions Ports (ISP)*
 - Parallel 1284-B interface
 - MarkNet N8130 10/100 fiber interface
 - RS-232-C serial interface

* This internal option is available only in the MS610de printer model.

Accessing the controller board

Access the controller board to install internal options.

For MS510dn and MS610dn, see “Accessing the controller board” on page 40.

For MS610de, see “Accessing the controller board” on page 74.

Installing an optional card

 **CAUTION—SHOCK HAZARD:** If you are accessing the controller board or installing optional hardware or memory devices sometime after setting up the printer, then turn the printer off, and unplug the power cord from the electrical outlet before continuing. If you have other devices attached to the printer, then turn them off as well, and unplug any cables going into the printer.

Warning—Potential Damage: Controller board electronic components are easily damaged by static electricity. Touch a metal surface on the printer before touching any controller board electronic components or connectors.

1 Access the controller board.

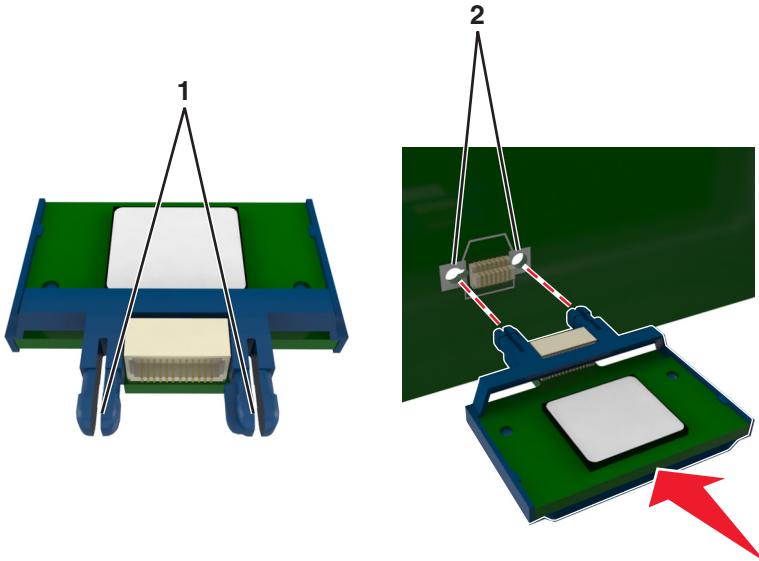
For the MS510dn and MS610dn printer models, see “Accessing the controller board” on page 40.

For the MS610de printer model, see “Accessing the controller board” on page 74.

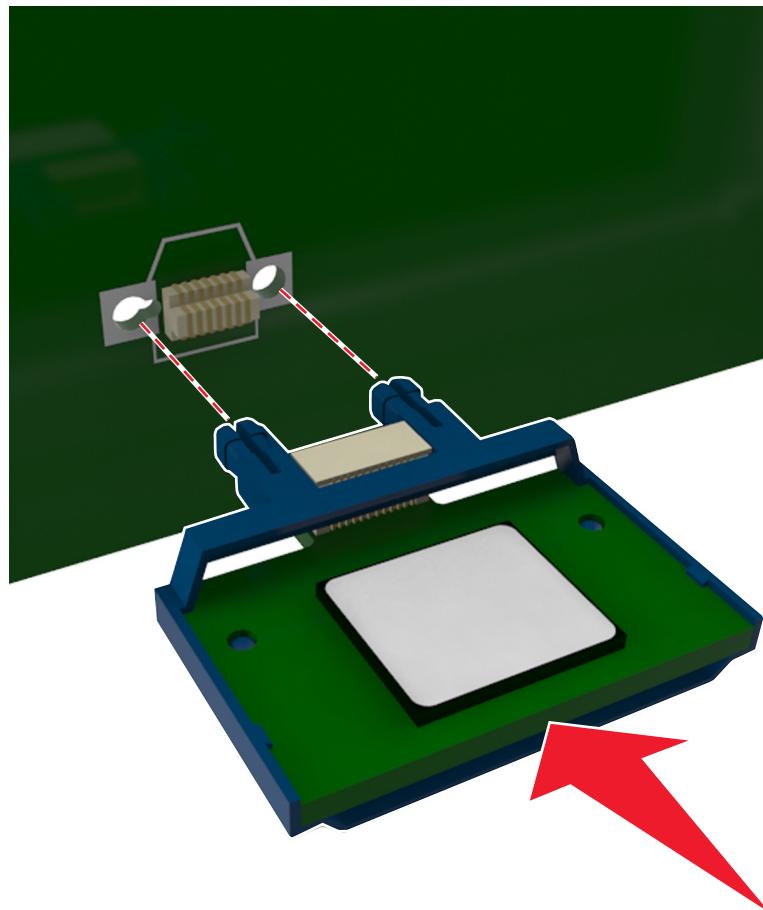
2 Unpack the optional card.

Warning—Potential Damage: Avoid touching the connection points along the edge of the card.

3 Holding the card by its sides, align the plastic pins (1) on the card with the holes (2) on the controller board.



- 4 Push the card firmly into place as shown in the illustration.



Warning—Potential Damage: Improper installation of the card may cause damage to the card and the controller board.

Note: The entire length of the connector on the card must touch and be flushed against the controller board.

- 5 For the MS510dn and MS610dn printer models, close the controller board access door.

For the MS610de printer model, close the controller board shield, and then close the access door.

Note: When the printer software and any hardware options are installed, you may need to manually add the options in the printer driver to make them available for print jobs. For more information, see “Updating available options in the printer driver” on page 29.

Installing a memory card

⚠ CAUTION—SHOCK HAZARD: If you are accessing the controller board or installing optional hardware or memory devices sometime after setting up the printer, then turn the printer off, and unplug the power cord from the electrical outlet before continuing. If you have any other devices attached to the printer, then turn them off as well, and unplug any cables going into the printer.

Warning—Potential Damage: Controller board electronic components are easily damaged by static electricity. Touch something metal on the printer before touching any controller board electronic components or connectors.

An optional memory card can be purchased separately and attached to the controller board.

1 Access the controller board.

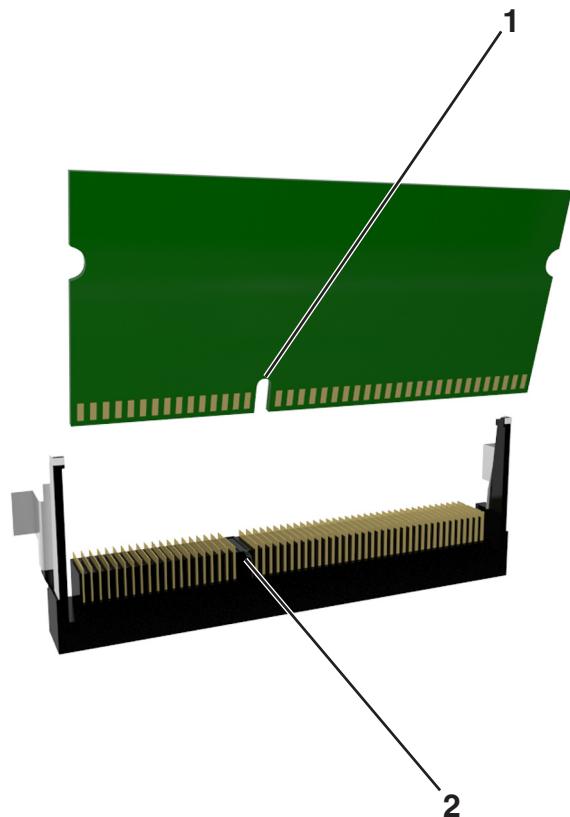
For the MS510dn and MS610dn printer models, see “Accessing the controller board” on page 40.

For the MS610de printer model, see “Accessing the controller board” on page 74.

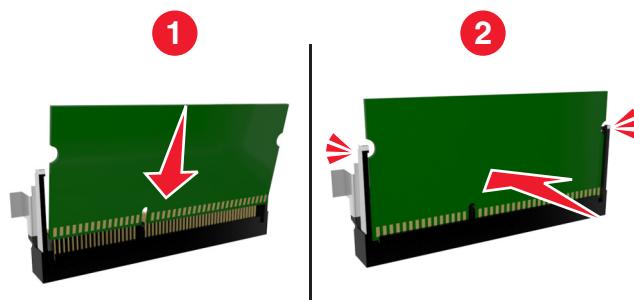
2 Unpack the memory card.

Warning—Potential Damage: Do not touch the connection points along the edge of the card. Doing so may cause damage.

3 Align the notch (1) on the memory card with the ridge (2) on the connector.



4 Push the memory card straight into the connector and forward into the controller board wall until it *clicks* into place.



5 For the MS510dn and MS610dn printer models, close the controller board access door.

For the MS610de printer model, close the controller board shield, and then close the access door.

Note: When the printer software and any hardware options are installed, you may need to manually add the options in the printer driver to make them available for print jobs. For more information, see “Updating available options in the printer driver” on page 29.

Installing an Internal Solutions Port

The controller board supports one optional Lexmark™ Internal Solutions Port (ISP). This option is supported only in MS610de printer model.

Note: This task requires a flat-head screwdriver.

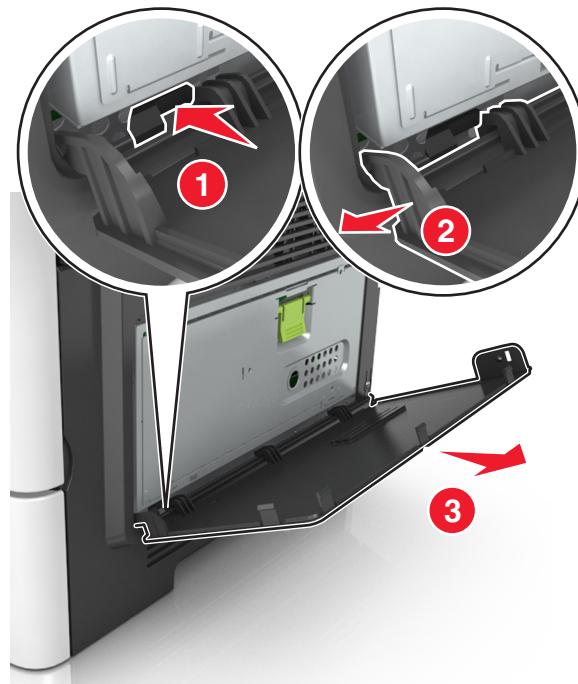
⚠ CAUTION—SHOCK HAZARD: If you are accessing the controller board or installing optional hardware or memory devices sometime after setting up the printer, then turn the printer off, and unplug the power cord from the electrical outlet before continuing. If you have any other devices attached to the printer, then turn them off as well, and unplug any cables going into the printer.

Warning—Potential Damage: Controller board electronic components are easily damaged by static electricity. Touch a metal surface on the printer before touching any controller board electronic components or connectors.

- 1 Open the controller board access door.

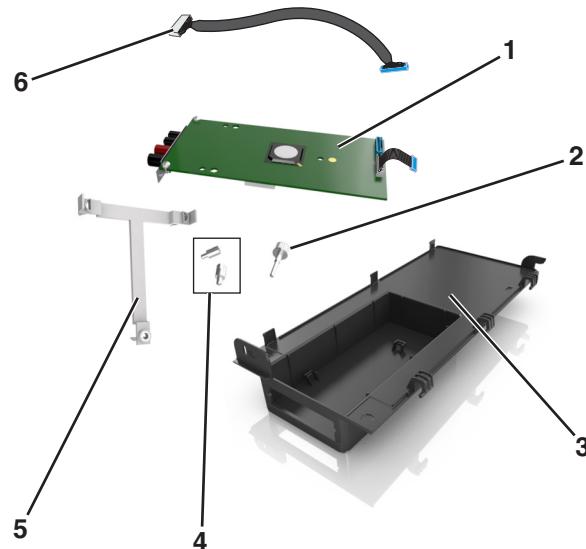


- 2** Lightly press the stop on the left side of the access door, and then slide the access door to remove it.



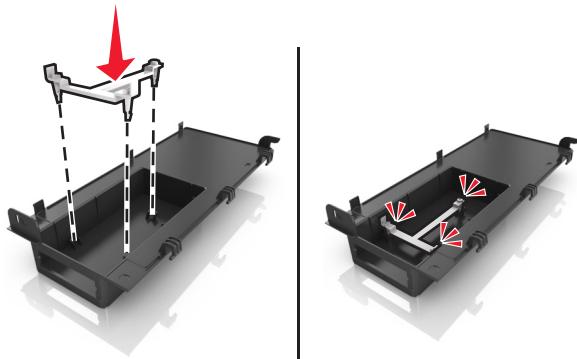
- 3** Unpack the ISP kit.

Note: Make sure to remove and discard the small cable attached to the white connector.

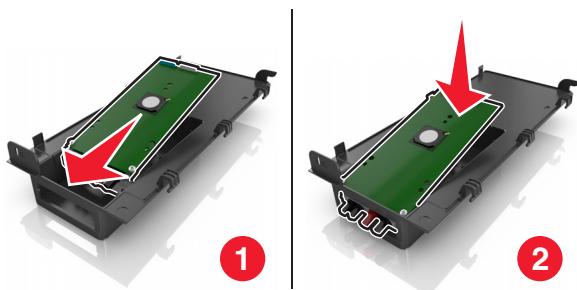


1	ISP solution
2	Screw to attach the ISP to the bracket
3	ISP exterior cover
4	Screws to attach the ISP metal bracket to the printer cage
5	Plastic bracket
6	Long ISP cable

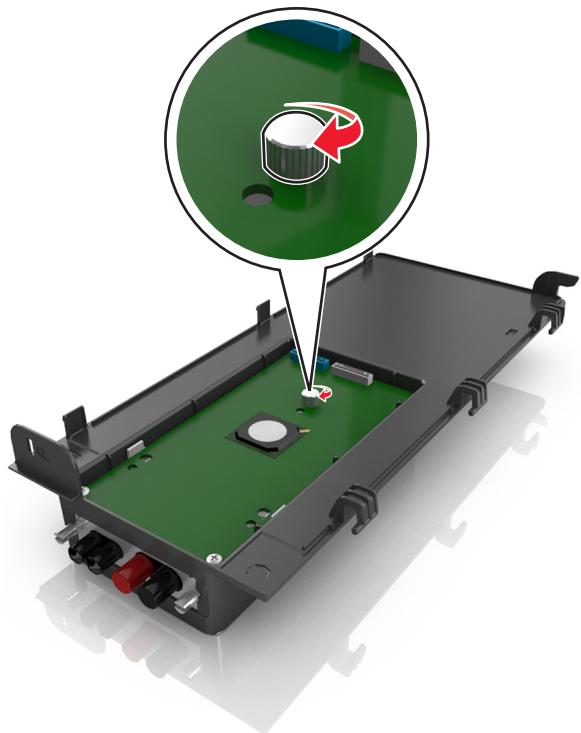
- 4 Place the plastic bracket inside the ISP exterior cover until it *clicks* into place.



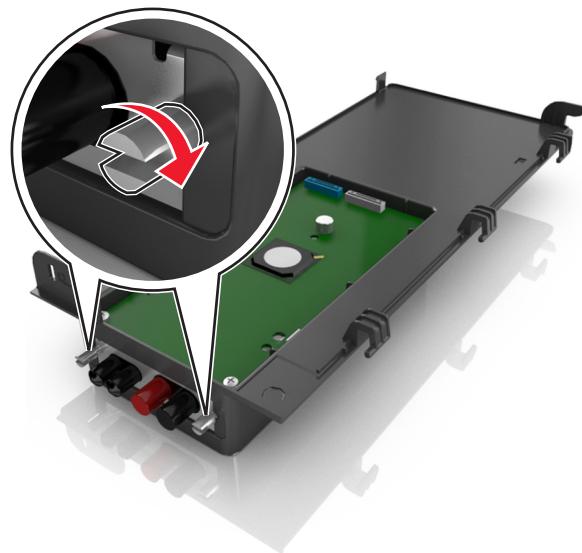
- 5 Slide and push the ISP solution into the plastic bracket.



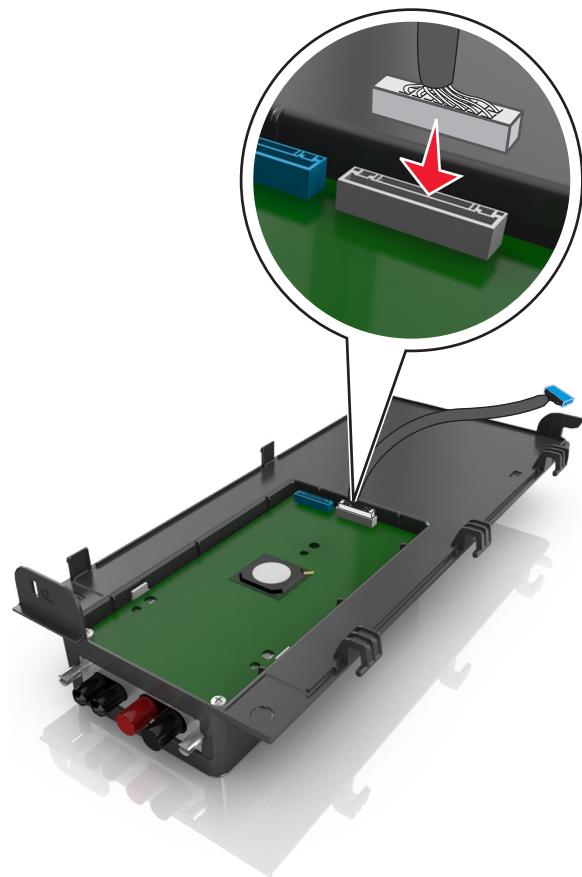
- 6 Secure the ISP solution to the plastic bracket using the long screw.



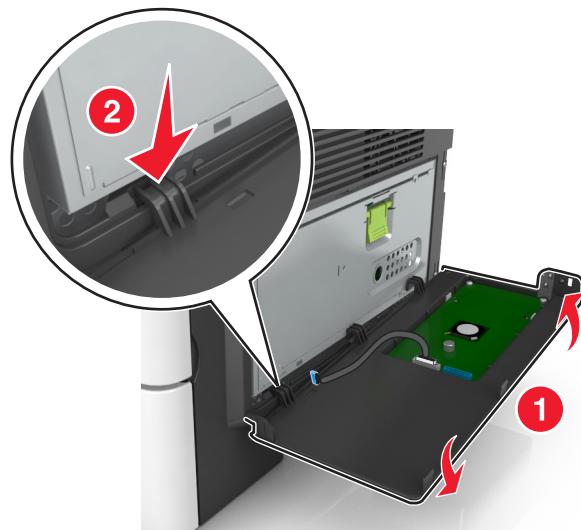
7 Tighten the two screws on the end of the ISP solution.



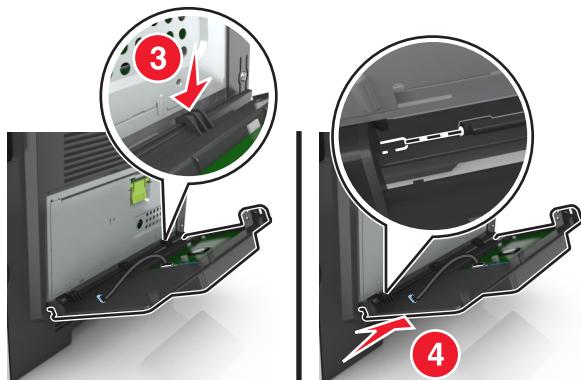
8 Attach the white plug of the ISP solution interface cable into the white receptacle on the ISP.



9 Attach the ISP exterior cover at an angle by inserting the left hinges first.



10 Lower the rest of the cover, and then slide the cover to the right.



- 11** Run the ISP cable through the controller board shield.

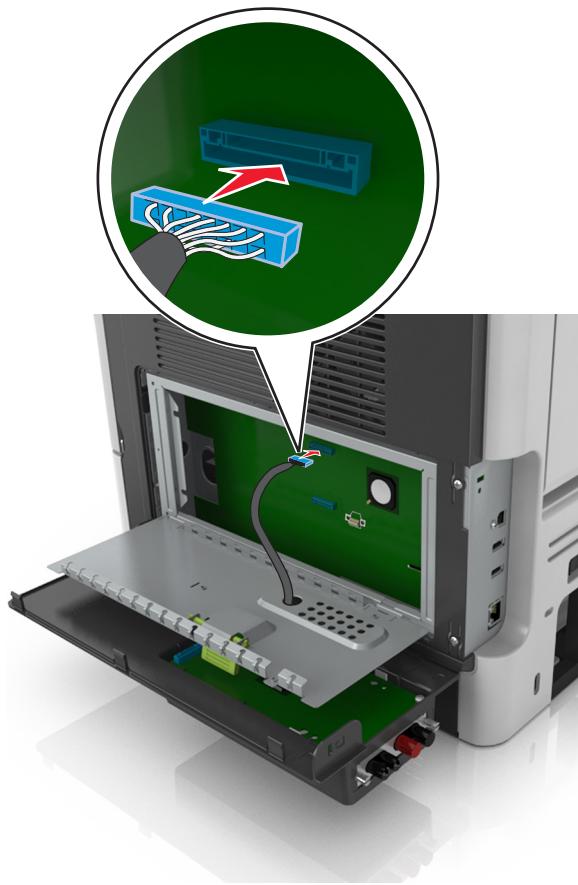


- 12** Open the shield using the green handle.



- 13** Attach the blue plug of the ISP solution interface cable into the blue receptacle on the controller board.

Note: If you have installed a printer hard disk, then you need to remove it. For more information, see “Removing a printer hard disk” on page 25. To reinstall the printer hard disk, see “Installing a printer hard disk” on page 23.



14 Close the shield.



15 Close the ISP exterior cover.

Note: When the printer software and any hardware options are installed, it may be necessary to manually add the options in the printer driver to make them available for print jobs. For more information, see “Updating available options in the printer driver” on page 29.

Installing a printer hard disk

Note: This option is available only in MS610de printer model.

⚠ CAUTION—SHOCK HAZARD: If you are accessing the controller board or installing optional hardware or memory devices sometime after setting up the printer, then turn the printer off, and unplug the power cord from the electrical outlet before continuing. If you have any other devices attached to the printer, then turn them off as well, and unplug any cables going into the printer.

Warning—Potential Damage: Controller board electronic components are easily damaged by static electricity. Touch something metal on the printer before touching any controller board electronic components or connectors.

- 1 Access the controller board.

For more information, see “Accessing the controller board” on page 74

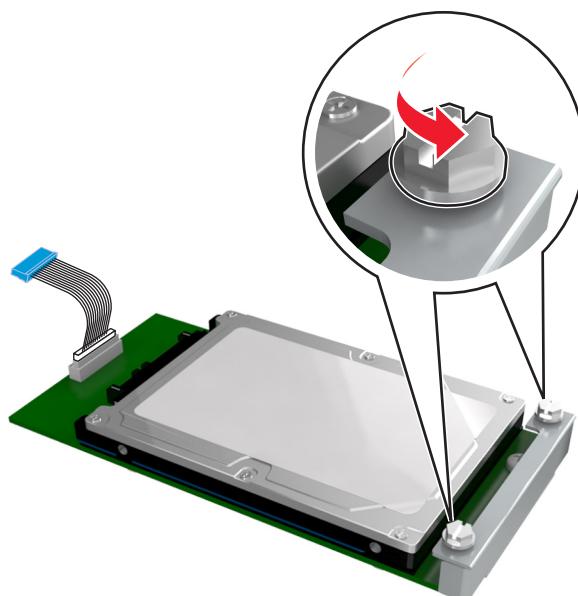
Note: This task requires a flathead screwdriver.

- 2 Unpack the printer hard disk.

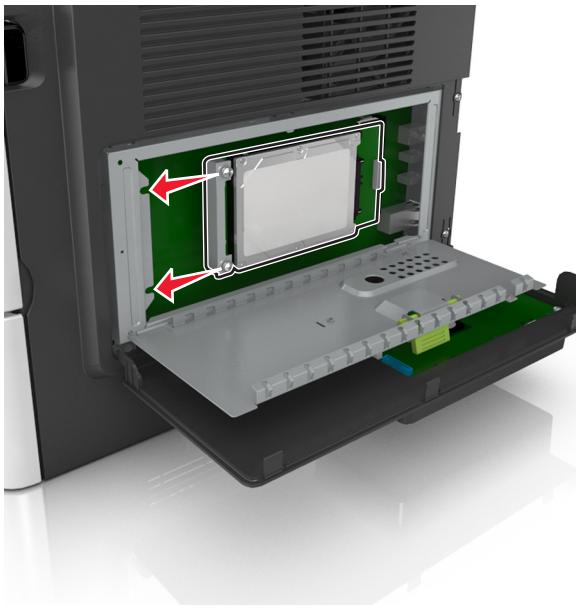
- 3 Install the printer hard disk on the controller board:

Warning—Potential Damage: Hold only the edges of the printed circuit board assembly. Do not touch or press on the center of the printer hard disk. Doing so may cause damage.

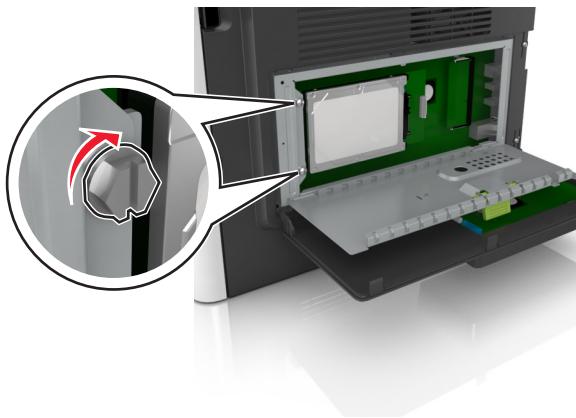
- a Using a flathead screwdriver, loosen the screws.



- b** Align the screws on the printer hard disk to the slots on the controller board bracket, and then slide the printer hard disk onto the brackets.

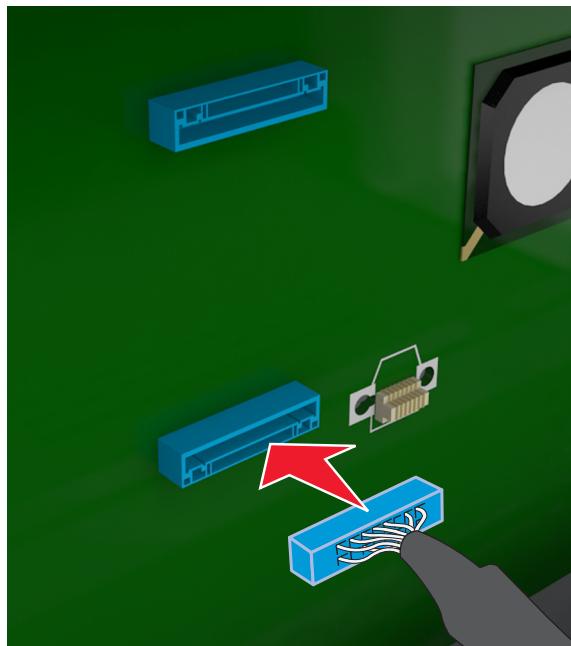


- c** Tighten the two screws.



- d** Insert the plug of the printer hard disk interface cable into the receptacle of the controller board.

Note: The plug and the receptacle are color-coded blue.



- 4 Close the controller board shield, and then close the access door.

Note: When the printer software and any hardware options are installed, you may need to manually add the options in the printer driver to make them available for print jobs. For more information, see “Updating available options in the printer driver” on page 29.

Removing a printer hard disk

Note: This option is supported only in MS610de printer model.

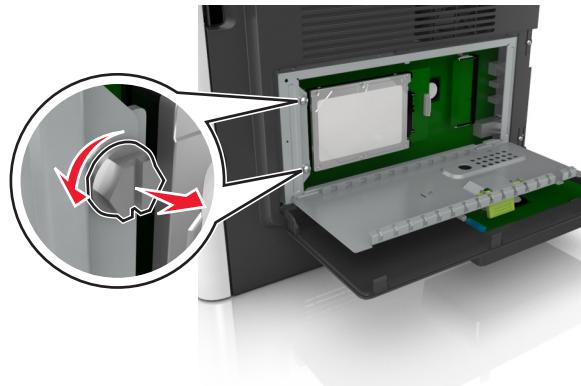
Warning—Potential Damage: Controller board electronic components are easily damaged by static electricity. Touch something metal on the printer before touching any controller board electronic components or connectors.

- 1 Access the controller board.

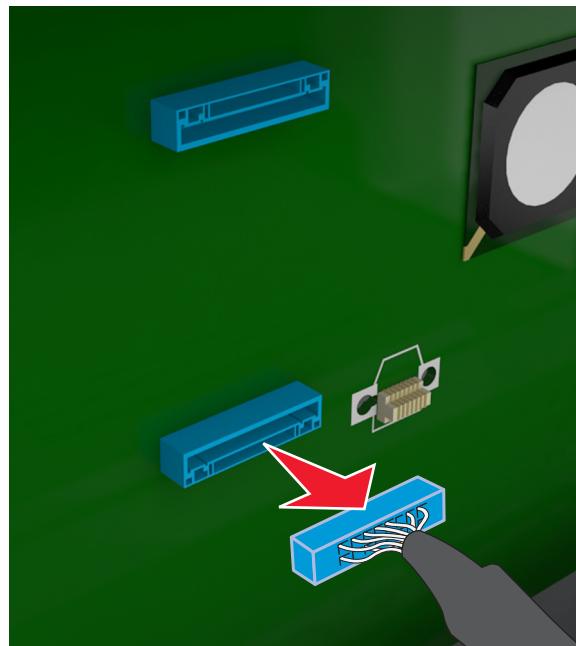
For MS610de printer model, see “Accessing the controller board” on page 74.

Note: This task requires a flathead screwdriver.

- 2 Loosen the screws that connect the printer hard disk to the controller board bracket.



- 3 Unplug the printer hard disk interface cable from the receptacle in the controller board , leaving the cable attached to the printer hard disk. To unplug the cable, squeeze the paddle at the plug of the interface cable to disengage the latch before pulling the cable out.



- 4 Hold the printer hard disk by the edges, and then remove it from the printer.
- 5 Close the controller board shield, and then close the access door.

Installing hardware options

Installing optional trays

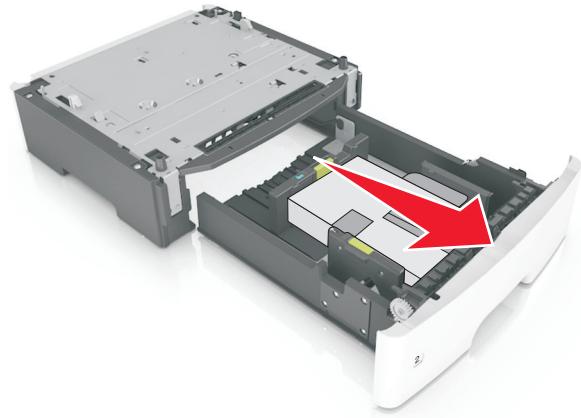
CAUTION—SHOCK HAZARD: If you are accessing the controller board or installing optional hardware or memory devices sometime after setting up the printer, then turn the printer off, and unplug the power cord from the electrical outlet before continuing. If you have any other devices attached to the printer, then turn them off as well, and unplug any cables going into the printer.

- 1 Turn off the printer using the power switch, and then unplug the power cord from the electrical outlet.



- 2 Unpack the tray, and then remove all packing materials.

- 3 Pull the tray completely out of the base.



- 4 Remove any packing material from inside the tray.
- 5 Insert the tray into the base.
- 6 Place the tray near the printer.
- 7 Align the printer with the tray, and then lower the printer into place.

Note: Optional trays lock together when stacked.



- 8 Connect the power cord to the printer, then to a properly grounded electrical outlet, and then turn on the printer.



Note: When the printer software and any hardware options are installed, you may need to manually add the options in the printer driver to make them available for print jobs. For more information, see “Updating available options in the printer driver” on page 29.

To uninstall the optional trays, slide the latch on the right side of the printer toward the front of the printer until it *clicks* into place, and then remove stacked trays one at a time from the top to the bottom.

Setting up the printer software

Installing the printer software

Notes:

- If you installed the printer software on the computer before but need to reinstall the software, then uninstall the current software first.
- Close all open software programs before installing the printer software.

1 Obtain a copy of the software installer package.

- From the *Software and Documentation* CD that came with your printer.

- From our Web site:

Go to www.lexmark.com, and then navigate to:

SUPPORT & DOWNLOADS > select your printer > select your operating system > download your software installer package

2 Do either of the following:

- If you are using the *Software and Documentation* CD, then insert the CD and wait for the installation dialog to appear.

If the installation dialog does not appear, then do the following:

In Windows 8

From the Search charm, type **run**, and then navigate to:

Apps list > **Run** > type **D:\setup.exe** > **OK**.

In Windows 7 or earlier

- a Click , or click **Start** and then click **Run**.
- b In the Start Search or Run dialog, type **D:\setup.exe**.
- c Press **Enter**, or click **OK**.

Note: D is the letter of your CD or DVD drive.

In Macintosh

Click the CD icon on the desktop.

- If you are using the downloaded software installer from the Web, then double-click the installer that you have saved in your computer. Wait for the Select Installation Type dialog to appear, and then click **Install**.

Note: If you are prompted to run your software installation package, then click **Run**.

- 3 Click **Install**, and then follow the instructions on the computer screen.

Updating available options in the printer driver

When any hardware options are installed, you may need to manually add the options in the printer driver to make them available for use.

For Windows users

- 1 Open the printers folder.

In Windows 8

From the Search charm, type **run**, and then navigate to:

Apps list > **Run** > type **control printers** > **OK**

In Windows 7 or earlier

- a Click  or click **Start**, and then click **Run**.
- b In the Start Search or Run dialog, type **control printers**.
- c Press **Enter**, or click **OK**.

- 2 Depending on your device, do either of the following:

- Press and hold the printer you want to update.
- Right-click the printer you want to update.

- 3 From the menu that appears, do either of the following:

- For Windows 7 or later, select **Printer properties**.
- For earlier versions, select **Properties**.

- 4 Click the **Configuration** tab.

- 5 Do either of the following:

- Click **Update Now - Ask Printer**.
- Under Configuration Options, manually add any installed hardware options.

- 6 Click **Apply**.

For Macintosh users

- 1 From the Apple menu, navigate to either of the following:

- **System Preferences** > **Print & Scan** > select your printer > **Options & Supplies** > **Driver**
- **System Preferences** > **Print & Fax** > select your printer > **Options & Supplies** > **Driver**

-
- 2 Add any installed hardware options, and then click **OK**.

Networking

Notes:

- Purchase a MarkNet™ N8352 wireless network adapter first before setting up the printer on a wireless network. For information on installing the wireless network adapter, see the instruction sheet that came with the adapter.
- A Service Set Identifier (SSID) is a name assigned to a wireless network. Wired Equivalent Privacy (WEP), Wi-Fi Protected Access (WPA), WPA2, and 802.1X - RADIUS are types of security used on a network.

Preparing to set up the printer on an Ethernet network

To configure your printer to connect to an Ethernet network, organize the following information before you begin:

Note: If your network automatically assigns IP addresses to computers and printers, continue on to installing the printer.

- A valid, unique IP address for the printer to use on the network
- The network gateway
- The network mask
- A nickname for the printer (optional)

Note: A printer nickname can make it easier for you to identify your printer on the network. You can choose to use the default printer nickname, or assign a name that is easier for you to remember.

You will need an Ethernet cable to connect the printer to the network and an available port where the printer can physically connect to the network. Use a new network cable when possible to avoid potential problems caused by a damaged cable.

Installing the printer on an Ethernet network

For Windows users

- 1 Obtain a copy of the software installer package.
 - From the *Software and Documentation* CD that came with your printer.
 - From our Web site:
Go to www.lexmark.com, and then navigate to:
SUPPORT & DOWNLOADS > select your printer > select your operating system > download your software installer package
- 2 Do either of the following:
 - If you are using the *Software and Documentation* CD, then insert the CD and wait for the installation dialog to appear.
If the installation dialog does not appear, then do the following:

In Windows 8

From the Search charm, type **run**, and then navigate to:

Apps list > **Run** > type **D:\setup.exe** > **OK**

In Windows 7 or earlier

- a Click , or click **Start** and then click **Run**.
- b In the Start Search or Run dialog, type **D:\setup.exe**.
- c Press **Enter**, or click **OK**.

Note: D is the letter of your CD or DVD drive.

- If you are using the downloaded software installer from the Web, then double-click the installer that you have saved in your computer. Wait for the Select Installation Type dialog to appear, and then click **Install**.

Note: If you are prompted to run your software installation package, then click **Run**.

3 Click **Install**, and then follow the instructions on the computer screen.

4 Select **Ethernet connection**, and then click **Continue**.

5 Attach the Ethernet cable when instructed to do so.

6 Select the printer from the list, and then click **Continue**.

Note: If the configured printer does not appear in the list, then click **Modify Search**.

7 Follow the instructions on the computer screen.

For Macintosh users

1 Allow the network DHCP server to assign an IP address to the printer.

2 Obtain the printer IP address either:

- From the printer control panel
- From the TCP/IP section in the Network/Ports menu
- By printing a network setup page or menu settings page, and then finding the TCP/IP section

Note: You will need the IP address if you are configuring access for computers on a different subnet than the printer.

3 Install the printer driver on the computer.

- a Insert the *Software and Documentation* CD, and then double-click the installer package for the printer.
- b Follow the instructions on the computer screen.
- c Select a destination, and then click **Continue**.
- d From the Easy Install screen, click **Install**.
- e Type the user password, and then click **OK**.
All the necessary applications are installed on the computer.
- f Click **Close** when installation is complete.

4 Add the printer.

- For IP printing:
 - a From the Apple menu, navigate to either of the following:
 - **System Preferences > Print & Scan**
 - **System Preferences > Print & Fax**

- b** Click +.
 - c** If necessary, click **Add Printer or Scanner** or **Add Other Printer or Scanner**.
 - d** Click the **IP** tab.
 - e** Type the printer IP address in the address field, and then click **Add**.
- For AppleTalk printing:

Notes:

- Make sure AppleTalk is activated on your printer.
 - This feature is supported only in Mac OS X version 10.5.
- a** From the Apple menu, navigate to:
System Preferences > Print & Fax
 - b** Click +, and then navigate to:
AppleTalk > select your printer > Add

Preparing to set up the printer on a wireless network

Notes:

- Make sure your wireless network adapter is installed in your printer and working properly.
- Make sure your access point (wireless router) is turned on and is working properly.

Make sure you have the following information before setting up the printer on a wireless network:

- **SSID**—The SSID is also referred to as the network name.
- **Wireless Mode (or Network Mode)**—The mode is either infrastructure or ad hoc.
- **Channel (for ad hoc networks)**—The channel defaults to automatic for infrastructure networks.

Some ad hoc networks will also require the automatic setting. Check with your system support person if you are not sure which channel to select.

- **Security Method**—There are three basic options for Security Method:

- WEP key

If your network uses more than one WEP key, then enter up to four in the provided spaces. Select the key currently in use on the network by selecting the default WEP transmit key.

or

- WPA or WPA2 preshared key or passphrase

WPA includes encryption as an additional layer of security. The choices are AES or TKIP. Encryption must be set for the same type on the router and on the printer, or the printer will not be able to communicate on the network.

- 802.1X—RADIUS

If you are installing the printer on an 802.1X network, then you may need the following:

- Authentication type
- Inner authentication type

- 802.1X user name and password
- Certificates
- No security

If your wireless network does not use any type of security, then you will not have any security information.

Note: Using an unsecured wireless network is not recommended.

Notes:

- If you do not know the SSID of the network that your computer is connected to, then launch the wireless utility of the computer network adapter, and then look for the network name. If you cannot find the SSID or the security information for your network, then see the documentation that came with the access point, or contact your system support person.
- To find the WPA/WPA2 preshared key/passphrase for the wireless network, see the documentation that came with the access point, see the Web page associated with the access point, or consult your system support person.

Connecting the printer using the Wireless Setup Wizard

Before you begin, make sure that:

- A wireless network adapter is installed in the printer and is working properly. For more information, see the instruction sheet that came with the wireless network adapter.
- The Ethernet cable is disconnected from the printer.
- Active NIC is set to Auto. To set this to Auto, navigate to either of the following:

- > Settings > > Network/Ports > > Active NIC > > Auto >
- > Network/Ports > Active NIC > Auto

Note: Make sure to turn off the printer, then wait for at least five seconds, and then turn the printer back on.

- 1 Depending on your printer model, navigate to either of the following:

- > Settings > > Network/Ports > > Network [x] > > Network [x] Setup > > Wireless > > Wireless Connection Setup >
- > Network/Ports > Network [x] > Network [x] Setup > Wireless > Wireless Connection Setup

- 2 Select a wireless connection setup.

Use	To
Search for networks	Show available wireless connections. Note: This menu item shows all broadcast secured or unsecured SSIDs.
Enter a network name	Manually type the SSID. Note: Make sure to type the correct SSID.
Wi-Fi Protected Setup	Connect the printer to a wireless network using Wi-Fi Protected Setup.

- 3 Follow the instructions on the printer display.

Connecting the printer to a wireless network using the Wi-Fi Protected Setup

Before connecting the printer to a wireless network, make sure that:

- The access point (wireless router) is Wi-Fi Protected Setup (WPS) certified or WPS-compatible. For more information, see the documentation that came with your access point.
- A wireless network adapter is installed in your printer and is working properly. For more information, see the instruction sheet that came with the wireless network adapter.

Using the Push Button Configuration Method

- 1 Depending on your printer model, navigate to either of the following:

- > Settings > > Networks/Ports > > Network [x] > > Network [x] Setup > > Wireless > > Wi-Fi Protected Setup > > Start Push Button Method >
- > Network/Ports > Network [x] > Network [x] Setup > Wireless > Wi-Fi Protected Setup > Start Push Button Method

- 2 Follow the instructions on the printer display.

Using the Personal Identification Number (PIN) Method

- 1 Depending on your printer model, navigate to either of the following:

- > Settings > > Networks/Ports > > Network [x] > > Network [x] Setup > > Wireless > > Wi-Fi Protected Setup > > Start PIN Method >
- > Network/Ports > Network [x] > Network [x] Setup > Wireless > Wi-Fi Protected Setup > Start PIN Method

- 2 Copy the eight-digit WPS PIN.

- 3 Open a Web browser, and then type the IP address of your access point in the address field.

Notes:

- The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are accessing a proxy server, then temporarily disable it to load the Web page correctly.

- 4 Access the WPS settings. For more information, see the documentation that came with your access point.

- 5 Enter the eight-digit PIN, and then save the setting.

Connecting the printer to a wireless network using the Embedded Web Server

Before you begin, make sure that:

- Your printer is connected temporarily to an Ethernet network.
- A wireless network adapter is installed in your printer and working properly. For more information, see the instruction sheet that came with your wireless network adapter.

- 1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address in the TCP/IP section in the Network/Ports menu. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.

- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

2 Click **Settings > Network/Ports > Wireless**.

3 Modify the settings to match the settings of your access point (wireless router).

Note: Make sure to enter the correct SSID.

4 Click **Submit**.

5 Turn off the printer, and then disconnect the Ethernet cable. Then wait for at least five seconds, and then turn the printer back on.

6 To verify if your printer is connected to the network, print a network setup page. Then in the Network Card [x] section, see if the status is “Connected”.

For more information, see the “Verifying printer setup” section of the *User’s Guide*.

Verifying printer setup

When all hardware and software options are installed and the printer is turned on, verify that the printer is set up correctly by printing the following:

- **Menu settings page**—Use this page to verify that all printer options are installed correctly. A list of installed options appears toward the bottom of the page. If an option you installed is not listed, then it is not installed correctly. Remove the option, and then install it again. For more information, see “Printing a menu settings page” on page 60 for non-touch-screen printer models, or “Printing a menu settings page” on page 103 for touch-screen printer models.
- **Network setup page**—If your printer has Ethernet or wireless capability and is attached to a network, then print a network setup page to verify the network connection. This page also provides important information that aids network printing configuration. For more information, see “Printing a network setup page” on page 61 for non-touch screen printer models, or “Printing a network setup page” on page 104 for touch-screen printer models.

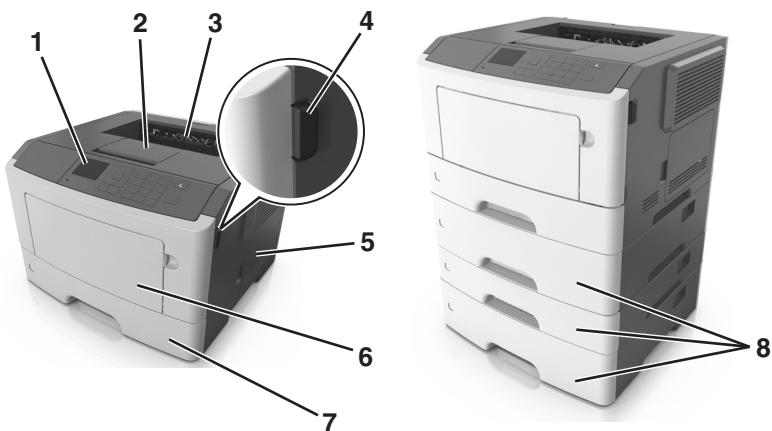
Using MS510dn and MS610dn

Learning about the printer

Printer configurations

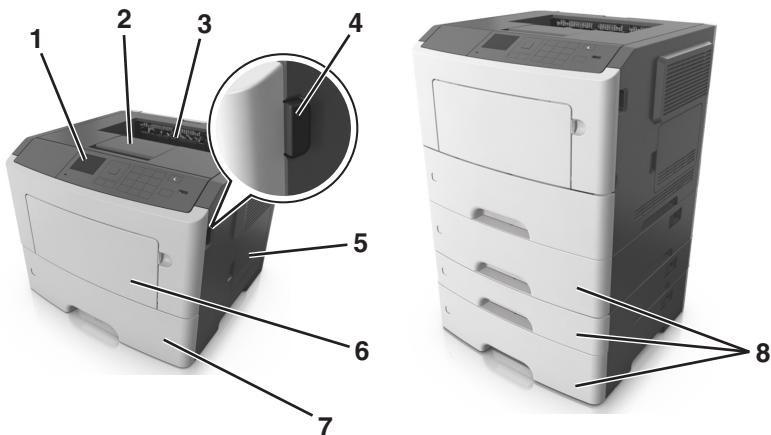
 **CAUTION—POTENTIAL INJURY:** To reduce the risk of equipment instability, load each tray separately. Keep all other trays closed until needed.

MS510dn printer model



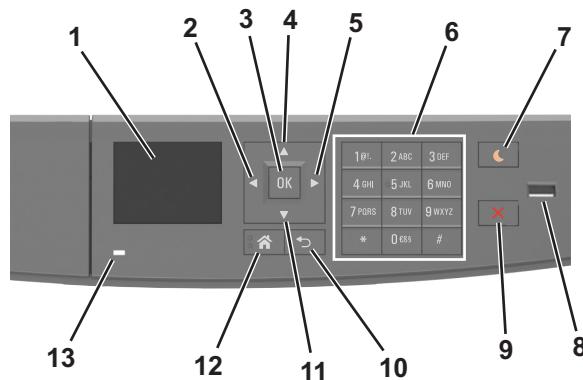
1	Printer control panel
2	Paper stop
3	Standard bin
4	Front door release button
5	Controller board access door
6	100-sheet multipurpose feeder
7	Standard 250-sheet tray
8	Optional 250- or 550-sheet trays

MS610dn printer model



1	Printer control panel
2	Paper stop
3	Standard bin
4	Front door release button
5	Controller board access door
6	100-sheet multipurpose feeder
7	Standard 550-sheet tray
8	Optional 250- or 550-sheet trays

Using the printer control panel



	Use the	To
1	Display	View the printer status and messages. Set up and operate the printer.
2	Left arrow button	Scroll to the left.
3	Select button	Select menu options. Save settings.
4	Up arrow button	Scroll up.

	Use the	To
5	Right arrow button	Scroll to the right.
6	Keypad	Enter numbers, letters, or symbols.
7	Sleep button	Enable Sleep mode or Hibernate mode. The following actions wake the printer from Sleep mode: <ul style="list-style-type: none"> • Pressing any hard button • Opening a tray or the front door • Sending a print job from the computer • Performing a power-on reset using the main power switch • Attaching a device in the USB port
8	USB port	Connect a flash drive to the printer. Notes: <ul style="list-style-type: none"> • Only the front USB port supports flash drives. • This feature is available only in select printer models.
9	Stop or cancel button	Stop all printer activities.
10	Back button	Return to the previous screen.
11	Down arrow button	Scroll down.
12	Home button	Go to the home screen.
13	Indicator light	Check the status of the printer.

Understanding the colors of the Sleep button and indicator lights

The colors of the Sleep button and indicator lights on the printer control panel signify a certain printer status or condition.

Indicator light	Printer status
Off	The printer is off or in Hibernate mode.
Blinking green	The printer is warming up, processing data, or printing.
Solid green	The printer is on, but idle.
Blinking red	The printer requires user intervention.
Sleep button light	Printer status
Off	The printer is off, idle or in Ready state.
Solid amber	The printer is in Sleep mode.
Blinking amber	The printer is entering or waking from Hibernate mode.
Blinking amber for 0.1 second, then goes completely off for 1.9 seconds in a slow, pulsing pattern	The printer is in Hibernate mode.

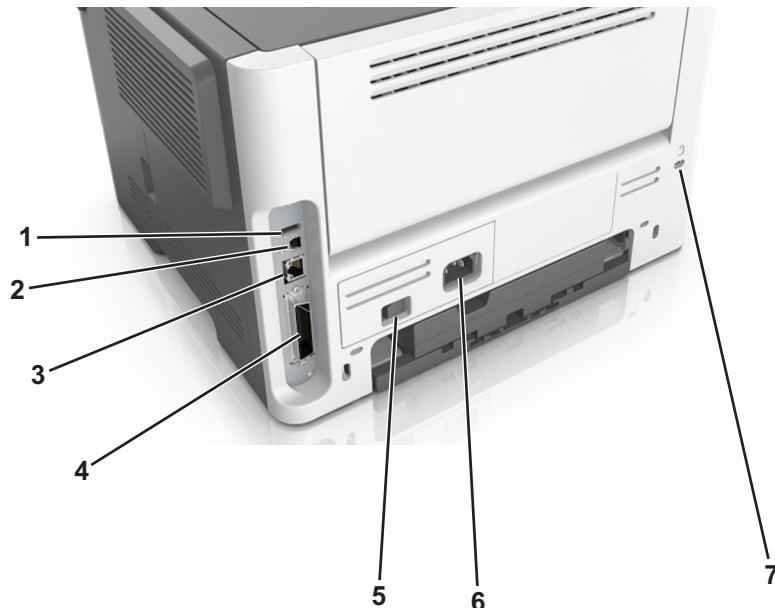
Attaching cables

Connect the printer to the computer using a USB or parallel cable, or to the network using an Ethernet cable.

Make sure to match the following:

- The USB symbol on the cable with the USB symbol on the printer
- The appropriate parallel cable with the parallel port
- The appropriate Ethernet cable with the Ethernet port

Warning—Potential Damage: Do not touch the USB cable, any network adapter, or the printer in the area shown while actively printing. Loss of data or a malfunction can occur.

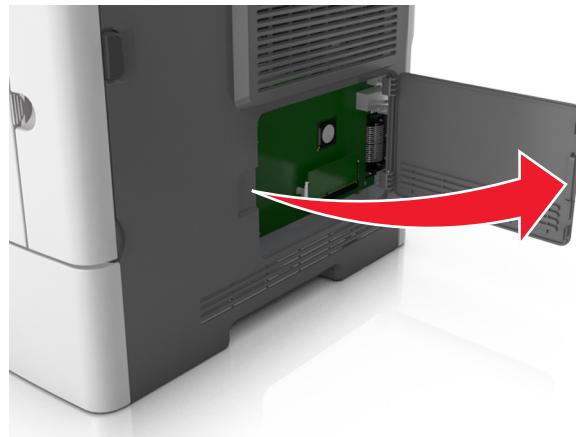


	Use the	To
1	USB port	Attach an optional wireless network adapter.
2	USB printer port	Connect the printer to a computer.
3	Ethernet port	Connect the printer to an Ethernet network.
4	Parallel port Note: This port is available only in select printer models.	Connect the printer to a computer.
5	Power switch	Turn on or turn off the printer.
6	Printer power cord socket	Connect the printer to an electrical outlet.
7	Security slot	Attach a lock that will secure the printer in place.

Accessing the controller board

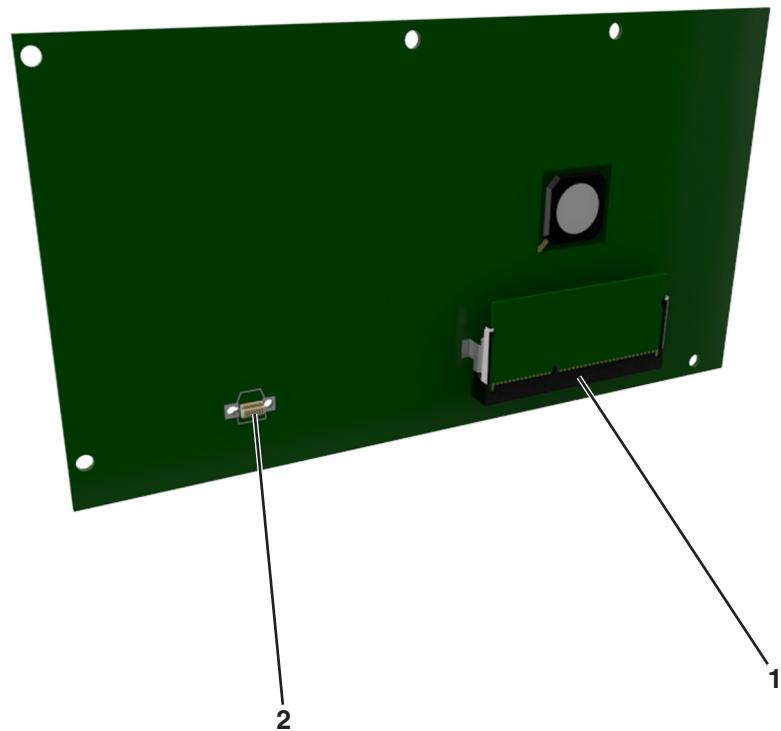
CAUTION—SHOCK HAZARD: If you are accessing the controller board or installing optional hardware or memory devices sometime after setting up the printer, then turn the printer off, and unplug the power cord from the electrical outlet before continuing. If you have any other devices attached to the printer, then turn them off as well, and unplug any cables going into the printer.

- 1 Open the controller board access door.



- 2 Use the following illustration to locate the appropriate connector.

Warning—Potential Damage: Controller board electronic components are easily damaged by static electricity. Touch a metal surface on the printer before touching any controller board electronic components or connectors.



1	Memory card connector
2	Option card connector

Loading paper and specialty media

The selection and handling of paper and specialty media can affect how reliably documents print. For more information, see “Avoiding jams” on page 181 and “Storing paper” on page 118.

Setting the paper size and type

- From the printer control panel, navigate to:

 > Settings >  > Paper Menu >  > Paper Size/Type > 

- Press the up or down arrow button to select the tray or feeder, and then press .

- Press the up or down arrow button to select the paper size, and then press .

- Press the up or down arrow button to select the paper type, and then press  to change the settings.

Configuring Universal paper settings

The Universal paper size is a user-defined setting that lets you print on paper sizes that are not preset in the printer menus.

Notes:

- The smallest Universal paper size is 6 x 127 mm (3 x 5 inches), and is supported only from the multipurpose feeder.
- The largest Universal paper size is 216 x 355.6 mm (8.5 x 14 inches), and is supported from all paper sources.

- From the printer control panel, navigate to:

 > Settings >  > Paper Menu >  > Universal Setup >  > Units of Measure >  > select a unit of measure > 

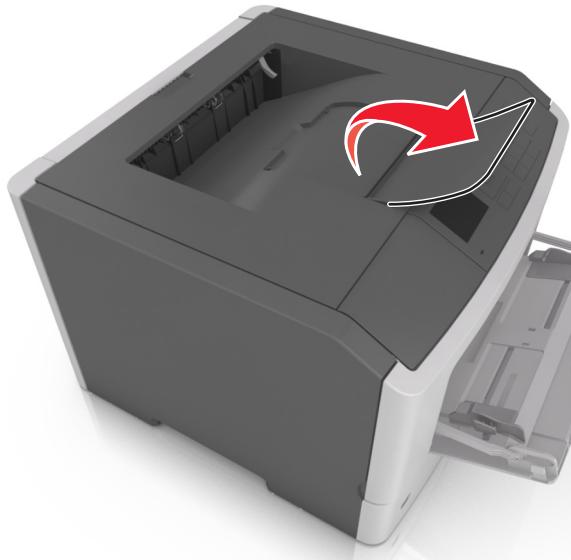
- Select **Portrait Width** or **Portrait Height**, and then press .

- Press the left or right arrow button to change the setting, and then press .

Using the standard bin and paper stop

The standard bin holds up to 150 sheets of 75-g/m² (20-lb) paper. It collects prints facedown. The standard bin includes a paper stop that keeps paper from sliding out the front of the bin as it stacks.

To open the paper stop, pull it so that it flips forward.



Note: Close the paper stop when moving the printer to another location.

Loading trays

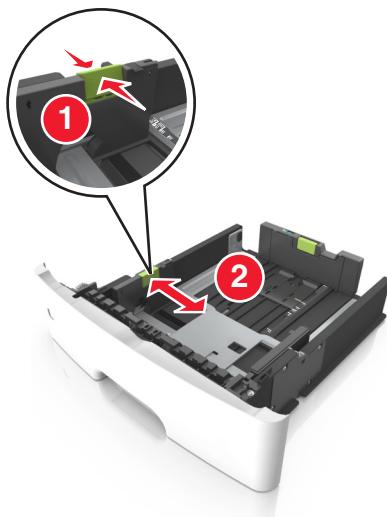
⚠ CAUTION—POTENTIAL INJURY: To reduce the risk of equipment instability, load each tray separately. Keep all other trays closed until needed.

- 1 Pull out the tray completely.

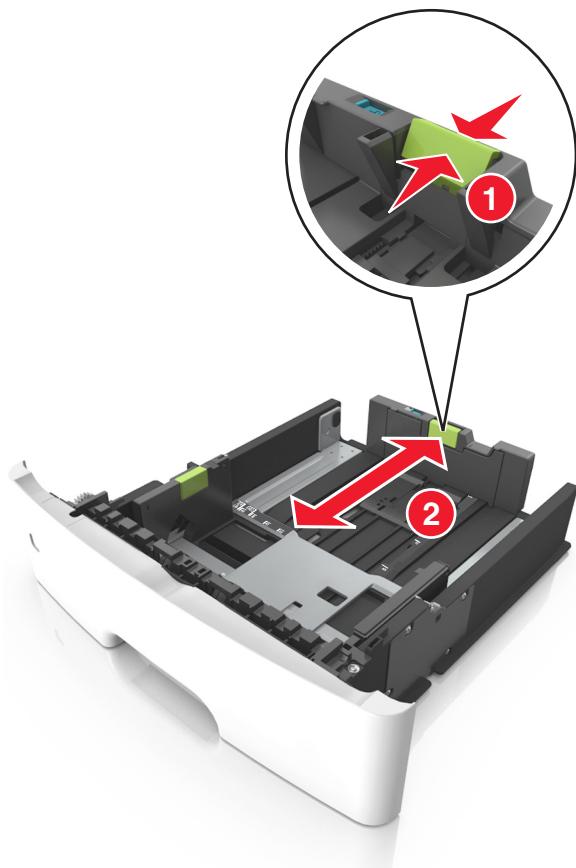
Note: Do not remove trays while a job prints or while **Busy** appears on the printer display. Doing so may cause a jam.



2 Squeeze and then slide the width guide tab to the correct position for the size of the paper you are loading.



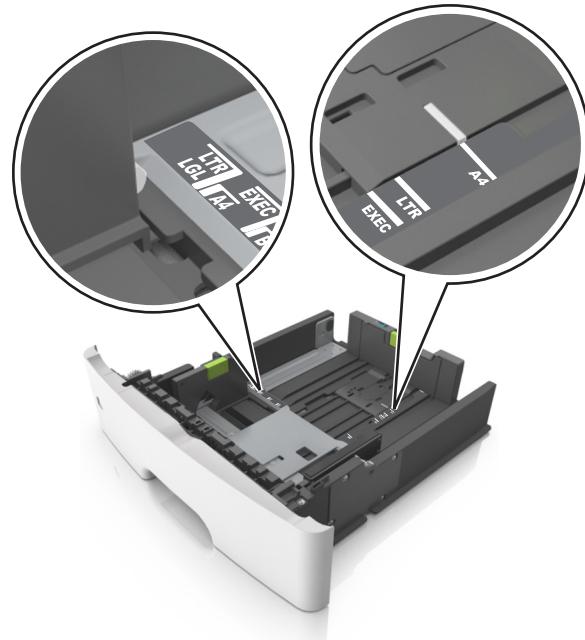
3 Squeeze and then slide the length guide tab to the correct position for the size of the paper you are loading.



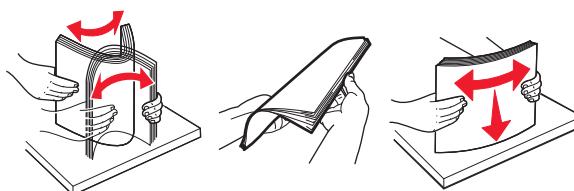
Notes:

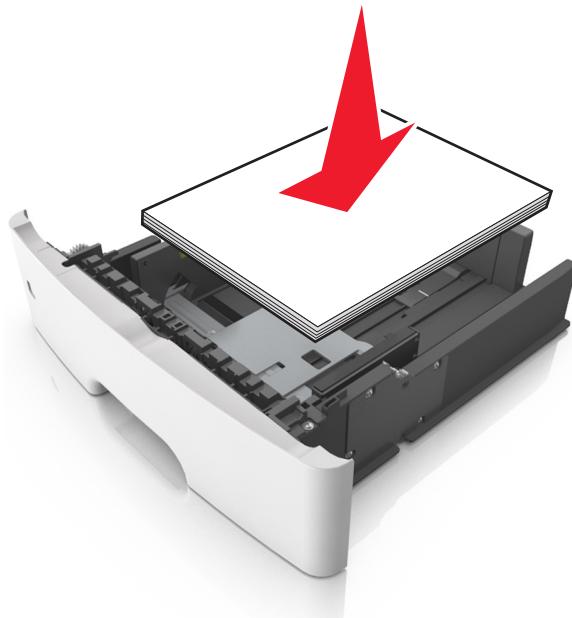
- For some paper sizes like letter, legal, and A4, squeeze and slide the length guide tab backward to accommodate their length.

- When loading legal-size paper, the length guide extends beyond the base leaving the paper exposed to dust. To protect the paper from dust, you can purchase a dust cover separately. For more information, contact customer support.
- If you are loading A6-size paper in the standard tray, then squeeze and then slide the length guide tab toward the center of the tray to the A6-size position.
- Make sure the width and length guides are aligned with the paper size indicators on the bottom of the tray.

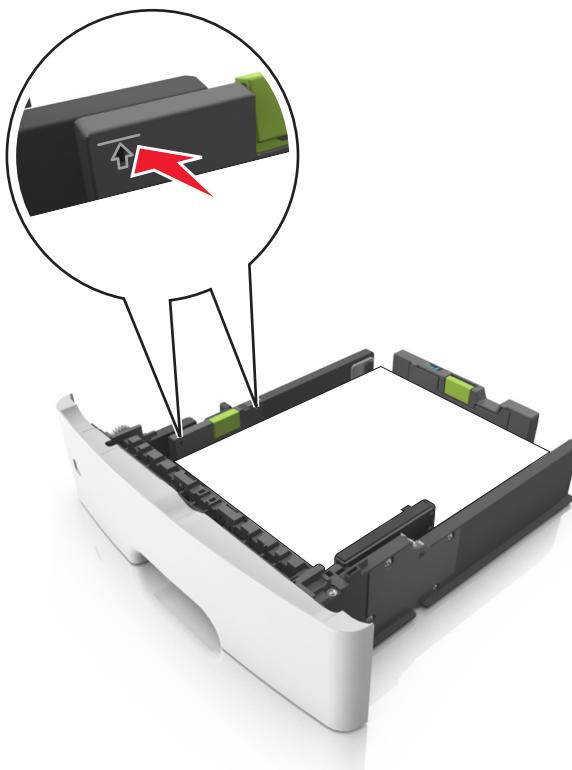


- 4 Flex the sheets back and forth to loosen them, and then fan them. Do not fold or crease the paper. Straighten the edges on a level surface.



5 Load the paper stack.**Notes:**

- Load with the printable side facedown when using recycled or preprinted paper.
- Load prepunched paper with the holes on the top edge toward the front of the tray.
- Load letterhead facedown, with the top edge of the sheet toward the front of the tray. For two-sided printing, load letterhead faceup with the bottom edge of the sheet toward the front of the tray.
- Make sure the paper is below the maximum paper fill indicator located on the side of the width guide.

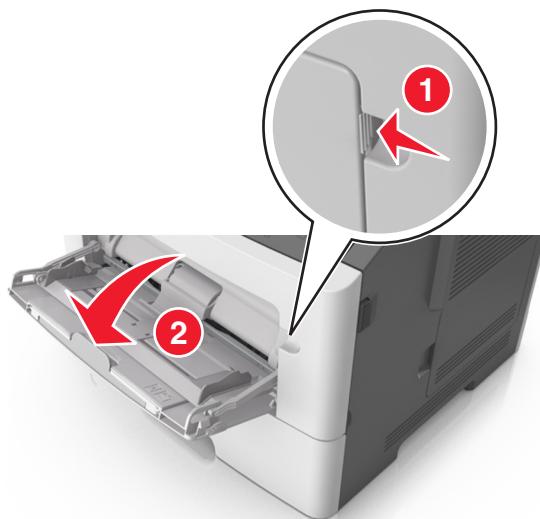


6 Insert the tray.**7** From the printer control panel, set the paper size and paper type in the Paper menu to match the paper loaded in the tray.

Note: Set the correct paper size and type to avoid paper jams and print quality problems.

Loading the multipurpose feeder

Use the multipurpose feeder when printing on different paper sizes and types or specialty media, such as card stock, transparencies, paper labels, and envelopes. You can also use it for single-page print jobs on letterhead.

1 Open the multipurpose feeder.

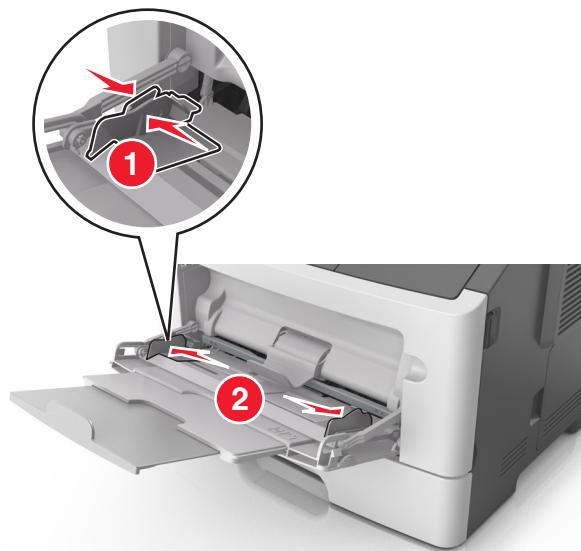
- a Pull the multipurpose feeder extender.



- b Pull the extender gently so that the multipurpose feeder is fully extended and open.

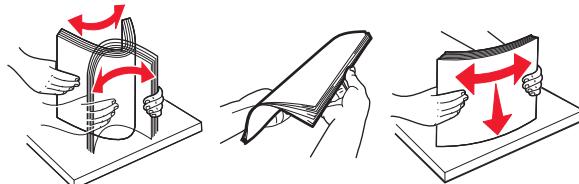


- 2 Squeeze the tab on the left width guide, and then move the guides for the paper you are loading.



3 Prepare the paper or specialty media for loading.

- Flex sheets of paper back and forth to loosen them, and then fan them. Do not fold or crease the paper. Straighten the edges on a level surface.



- Hold transparencies by the edges. Flex the stack of transparencies back and forth to loosen them, and then fan them. Straighten the edges on a level surface.

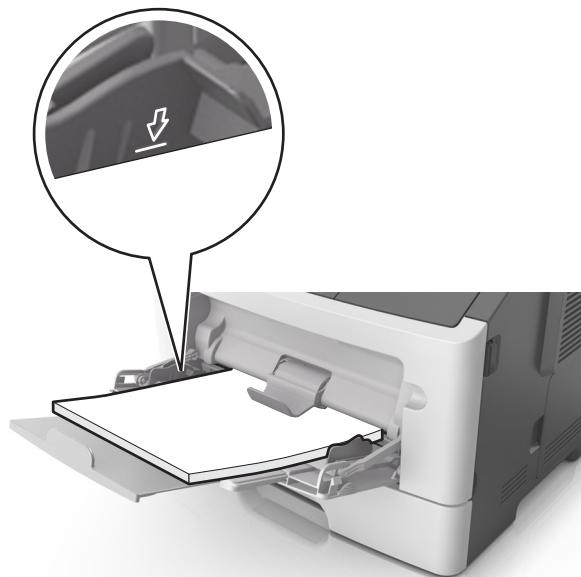
Note: Avoid touching the printable side of the transparencies. Be careful not to scratch them.



- Flex the stack of envelopes back and forth to loosen them, and then fan them. Straighten the edges on a level surface.

**4** Load the paper or specialty media.**Notes:**

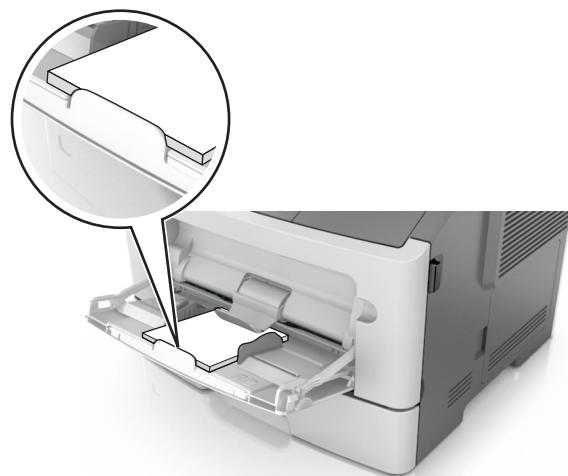
- Do not force paper or specialty media into the multipurpose feeder.
- Make sure the paper or specialty media is below the maximum paper fill indicator located on the paper guides. Overfilling may cause paper jams.



- Load paper, transparencies, and card stock with the recommended printable side faceup and the top edge entering the printer first. For more information on loading transparencies, see the packaging that the transparencies came in.



Note: When loading A6-size paper, make sure the multipurpose feeder extender rests lightly against the edge of the paper so that the last few sheets of paper remain in place.



- Load letterhead faceup with the top edge entering the printer first. For two-sided (duplex) printing, load letterhead facedown with the bottom edge entering the printer first.



- Load envelopes with the flap on the left side facedown.



Warning—Potential Damage: Never use envelopes with stamps, clasps, snaps, windows, coated linings, or self-stick adhesives. These envelopes may severely damage the printer.

- 5 From the printer control panel, set the paper size and paper type in the Paper menu to match the paper or specialty media loaded in the multipurpose feeder.

Linking and unlinking trays

Linking and unlinking trays

- 1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address on the printer control panel in the TCP/IP section under the Network/Ports menu. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

- 2 Click **Settings > Paper Menu**.

- 3 Change the paper size and type settings for the trays you are linking.

- To link trays, make sure the paper size and type for the tray match that of the other tray.
- To unlink trays, make sure the paper size or type for the tray does *not* match that of the other tray.

- 4 Click **Submit**.

Note: You can also change the paper size and type settings using the printer control panel. For more information, see “Setting the paper size and type” on page 41.

Warning—Potential Damage: Paper loaded in the tray should match the paper type name assigned in the printer. The temperature of the fuser varies according to the specified paper type. Printing issues may occur if settings are not properly configured.

Creating a custom name for a paper type

Using the Embedded Web Server

- 1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address in the TCP/IP section in the Network/Ports menu. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

- 2 Click **Settings > Paper Menu > Custom Names**.

- 3 Select a custom name, and then type a new custom paper type name.

- 4 Click **Submit**.

- 5 Click **Custom Types**, and then verify if the new custom paper type name has replaced the custom name.

Using the printer control panel

- 1 From the printer control panel, navigate to:

 > **Settings** >  > **Paper Menu** >  > **Custom Names**

- 2 Select a custom name, and then type a new custom paper type name.

- 3 Press .

- 4 Press **Custom Types**, and then verify if the new custom paper type name has replaced the custom name.

Assigning a custom paper type

Using the Embedded Web Server

- 1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address in the TCP/IP section in the Network/Ports menu. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

- 2 Click **Settings > Paper Menu > Custom Types**.

- 3 Select a custom paper type name, and then select a paper type.

Note: Paper is the factory default paper type for all user-defined custom names.

- 4 Click **Submit**.

Using the printer control panel

- 1 From the printer control panel, navigate to:

 > **Settings** >  > **Paper Menu** >  > **Custom Types**

- 2 Select a custom paper type name, and then select a paper type.

Note: Paper is the factory default paper type for all user-defined custom names.

- 3 Press .

Printing

Printing a document

Printing a document

- 1 From the Paper menu on the printer control panel, set the paper type and size to match the paper loaded.
- 2 Send the print job:

For Windows users

- a With a document open, click **File > Print**.
- b Click **Properties, Preferences, Options, or Setup**.
- c Adjust the settings, if necessary.
- d Click **OK > Print**.

For Macintosh users

- a Customize the settings in the Page Setup dialog if necessary:
 - 1 With a document open, choose **File > Page Setup**.
 - 2 Choose a paper size or create a custom size to match the paper loaded.
 - 3 Click **OK**.
- b Customize the settings in the Page Setup dialog if necessary:
 - 1 With a document open, choose **File > Print**.
If necessary, click the disclosure triangle to see more options.
 - 2 From the Print dialog and pop-up menus adjust the settings if necessary.

Note: To print on a specific paper type, adjust the paper type setting to match the paper loaded, or select the appropriate tray or feeder.

- 3 Click **Print**.

Adjusting toner darkness

Using the Embedded Web Server

- 1 Open a Web browser, and then type the IP address of the printer in the address field.

Notes:

- View the printer IP address in the TCP/IP section in the Network/Ports menu. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

2 Click **Settings > Print Settings > Quality Menu > Toner Darkness**.

3 Adjust the toner darkness, and then click **Submit**.

Using the printer control panel

1 From the printer control panel, navigate to:

 > **Settings** >  > **Print Settings** >  > **Quality Menu** >  > **Toner Darkness**

2 Adjust the toner darkness, and then press .

Printing from a flash drive or mobile device**Printing from a flash drive****Notes:**

- Before printing an encrypted PDF file, you will be prompted to enter the file password from the printer control panel.
- You cannot print files for which you do not have printing permissions.

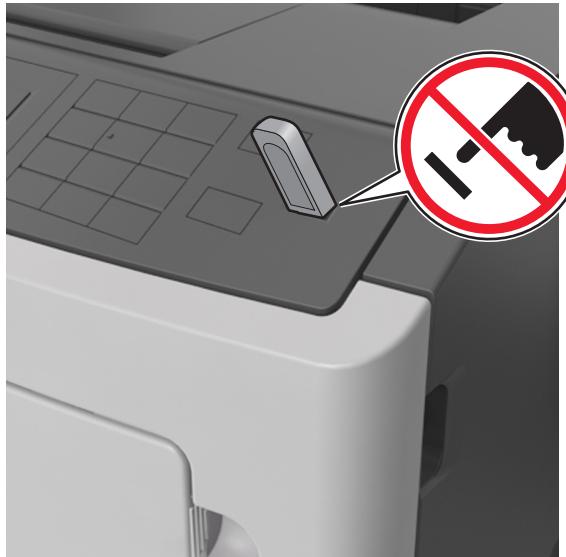
1 Insert a flash drive into the USB port.

**Notes:**

- A flash drive icon appears on the printer control panel and in the held jobs icon when a flash drive is installed.

- If you insert the flash drive when the printer requires attention, such as when a jam has occurred, then the printer ignores the flash drive.
- If you insert the flash drive while the printer is processing other print jobs, then **Busy** appears. After these print jobs are processed, you may need to view the held jobs list to print documents from the flash drive.

Warning—Potential Damage: Do not touch the printer or the flash drive in the area shown while actively printing, reading, or writing from the memory device. Loss of data can occur.



2 From the printer control panel, select the document you want to print.

3 Press the left or right arrow button to specify the number of copies for printing, and then press **OK**.

Notes:

- Do not remove the flash drive from the USB port until the document has finished printing.
- If you leave the flash drive in the printer after leaving the initial USB menu screen, then access held jobs from the printer control panel to print files from the flash drive.

Supported flash drives and file types

Flash drive	File type
<p>Notes:</p> <ul style="list-style-type: none"> • Hi-speed USB flash drives must support the full-speed standard. Low-speed USB devices are not supported. • USB flash drives must support the File Allocation Table (FAT) system. Devices formatted with New Technology File System (NTFS) or any other file system are not supported. 	<p>Documents:</p> <ul style="list-style-type: none"> • .pdf • .xps <p>Images:</p> <ul style="list-style-type: none"> • .dcx • .gif • .JPEG or .jpg • .bmp • .pcx • .TIFF or .tif • .png

Printing from a mobile device

To download a compatible mobile printing application, visit www.lexmark.com/mobile.

Note: Mobile printing applications may also be available from your mobile device manufacturer.

Printing confidential and other held jobs

Storing print jobs in the printer

- 1 From the printer control panel, navigate to:



> Security > Confidential Print

- 2 Select a print job type.

Use	To
Confidential Job Expiration	Hold print jobs in the computer until you enter the PIN from the printer control panel. Note: The PIN is set from the computer. It must be four digits, using the numbers 0–9.
Max Invalid PIN	Limit the number of times an invalid PIN can be entered. Note: When the limit is reached, the print jobs for that user name and PIN are deleted.
Repeat Job Expiration	Print and store print jobs in the printer memory.
Reserve Job Expiration	Store print jobs for printing at a later time. Note: The print jobs are held until deleted from the Held Jobs menu.
Verify Job Expiration	Print one copy of a print job and hold the remaining copies. It lets you examine if the first copy is satisfactory. Note: The print job is automatically deleted from the printer memory once all copies are printed.

Notes:

- Confidential, Verify, Reserve, and Repeat print jobs may be deleted if the printer requires extra memory to process additional held jobs.
- You can set the printer to store print jobs in the printer memory until you start the print job from the printer control panel.
- All print jobs that can be initiated by the user at the printer are called *held jobs*.

- 3 Press **OK**.

Printing confidential and other held jobs

Note: Confidential and Verify print jobs are automatically deleted from memory after printing. Repeat and Reserve jobs are held in the printer until you choose to delete them.

For Windows users

- 1 With a document open, click **File > Print**.
- 2 Click **Properties, Preferences, Options, or Setup**.
- 3 Click **Print and Hold**.
- 4 Select the print job type (Confidential, Repeat, Reserve, or Verify), and then assign a user name. For a confidential print job, also enter a four-digit PIN.
- 5 Click **OK or Print**.
- 6 From the printer control panel, release the print job.
 - For confidential print jobs, navigate to:
Held jobs > select your user name > Confidential Jobs > enter the PIN > select the print job > specify the number of copies > Print
 - For other print jobs, navigate to:
Held jobs > select your user name > select the print job > specify the number of copies > Print

For Macintosh users

- 1 With a document open, choose **File > Print**.
If necessary, click the disclosure triangle to see more options.
- 2 From the print options or Copies & Pages pop-up menu, choose **Job Routing**.
- 3 Select the print job type (Confidential, Repeat, Reserve, or Verify), and then assign a user name. For a confidential print job, also enter a four-digit PIN.
- 4 Click **OK or Print**.
- 5 From the printer control panel, release the print job:
 - For confidential print jobs, navigate to:
Held jobs > select your user name > Confidential Jobs > enter the PIN > select the print job > specify the number of copies > Print
 - For other print jobs, navigate to:
Held jobs > select your user name > select the print job > specify the number of copies > Print

Printing information pages

Printing a font sample list

- 1 From the printer control panel, navigate to:

Home > Settings > OK > Reports > OK > Print Fonts
- 2 Press the up or down arrow button to select the font setting.

- 3 Press .

Note: The PPDS fonts appear only when the PPDS data stream is activated.

Printing a directory list

From the printer control panel, navigate to:



Note: The Print Directory menu item appears only when an optional flash memory or printer hard disk is installed.

Cancelling a print job

Cancelling a print job from the printer control panel

From the printer control panel, press  > .

Cancelling a print job from the computer

For Windows users

- 1 Open the printers folder.

In Windows 8

From the Search charm, type **run**, and then navigate to:

Apps list > **Run** > type **control printers** > **OK**

In Windows 7 or earlier

- a Click  or click **Start**, and then click **Run**.
- b In the Start Search or Run dialog, type **control printers**.
- c Press **Enter**, or click **OK**.

- 2 Double-click the printer icon.

- 3 Select the print job you want to cancel.

- 4 Click **Delete**.

For Macintosh users

- 1 From the Apple menu, navigate to either of the following:

- **System Preferences** > **Print & Scan** > select your printer > **Open Print Queue**
- **System Preferences** > **Print & Fax** > select your printer > **Open Print Queue**

- 2 From the printer window, select the print job you want to cancel, and then delete it.

Managing the printer

Finding advanced networking and administrator information

This chapter covers basic administrative support tasks using the Embedded Web Server. For more advanced system support tasks, see the *Networking Guide* on the *Software and Documentation CD* or the *Embedded Web Server — Security: Administrator's Guide* on the Lexmark support Web site at <http://support.lexmark.com>.

Checking the virtual display

- 1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address in the TCP/IP section in the Network/Ports menu. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

- 2 Check the virtual display that appears at the top left corner of the screen.

The virtual display works as an actual display would work on a printer control panel.

Configuring supply notifications from the Embedded Web Server

You can determine how you would like to be notified when supplies run nearly low, low, very low, or reach their end-of-life by setting the selectable alerts.

Notes:

- Selectable alerts can be set on the toner cartridge, imaging unit, and maintenance kit.
- All selectable alerts can be set for nearly low, low, and very low supply conditions. Not all selectable alerts can be set for the end-of-life supply condition. E-mail selectable alert is available for all supply conditions.
- The percentage of estimated remaining supply that prompts the alert can be set on some supplies for some supply conditions.

- 1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address in the TCP/IP section in the Network/Ports menu. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

- 2 Click **Settings > Print Settings > Supply Notifications**.

- 3 From the drop-down menu for each supply, select one of the following notification options:

Notification	Description
Off	The normal printer behavior for all supplies occurs.
E-mail Only	The printer generates an e-mail when the supply condition is reached. The status of the supply will appear on the menus page and status page.
Warning	The printer displays the warning message and generates an email about the status of the supply. The printer does not stop when the supply condition is reached.
Continuable Stop ¹	The printer stops processing jobs when the supply condition is reached, and the user needs to press a button to continue printing.
Non Continuable Stop ^{1,2}	The printer stops when the supply condition is reached. The supply must be replaced to continue printing.

¹ The printer generates an e-mail about the status of the supply when supply notification is enabled.
² The printer stops when some supplies become empty to prevent damage.

4 Click **Submit**.

Modifying confidential print settings

Note: This feature is available only in network printers or printers connected to print servers.

1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address in the TCP/IP section in the Network/Ports menu. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

2 Click **Settings tab > Security > Confidential Print Setup**.

3 Modify the settings:

- Set a maximum number of PIN entry attempts. When a user exceeds a specific number of PIN entry attempts, all of the jobs for that user are deleted.
- Set an expiration time for confidential print jobs. When a user has not printed the jobs within the specified time, all of the jobs for that user are deleted.

4 Save the modified settings.

Copying printer settings to other printers

Note: This feature is available only in network printers.

1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address in the TCP/IP section in the Network/Ports menu. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

2 Click the **Copy Printer Settings**.

3 To change the language, select a language from the drop-down menu, and then click **Click here to submit language**.

4 Click **Printer Settings**.

5 Type the IP addresses of the source and target printers in their appropriate fields.

Note: If you want to add or remove a target printer, then click **Add Target IP** or **Remove Target IP**.

6 Click **Copy Printer Settings**.

Creating a printer control panel PIN

The Panel PIN Protect menu lets you restrict access to the menus from the printer control panel. To restrict access to the menus, create a Personal Identification Number (PIN), and then assign the PIN to each menu.

1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address in the TCP/IP section in the Network/Ports menu. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

2 Click **Settings > Security > Panel PIN Protect**.

3 From the Create User PIN or Create Admin PIN sections, enter your PIN.

Note: You can enter up to 16 digits for your PIN.

4 Click **Modify**.

5 From any menu in the Administrative Menus, Management, or Function Access sections, select **User PIN Protected** or **Admin PIN Protected** or **Admin PIN and User PIN Protected**.

Note: Using an Admin PIN, you can still access a menu assigned with a User PIN.

6 Click **Submit**.

If you try to access a PIN-protected menu from the printer control panel, the printer will require you to enter the PIN.

Note: After you enter the last digit of the PIN, make sure to press  on the printer control panel for more than three seconds.

Printing a menu settings page

Print a menu settings page to view the current menu settings and to verify if the printer options are installed correctly.

From the printer control panel, navigate to:



Note: If you have not changed any menu settings, then the menu settings page lists all the factory default settings. Settings saved from the menus replace the factory default settings as *user default settings*. A user default setting remains in effect until you access the menu again, select another value, and save it.

Printing a network setup page

If the printer is attached to a network, then print a network setup page to verify the network connection. This page also provides important information that aids network printing configuration.

- 1 From the printer control panel, navigate to:

 > **Settings** > **Reports** >  > **Network Setup Page** > 

Note: If an optional internal print server is installed, then **Print Network [x] Setup Page** appears.

- 2 Check the first section of the network setup page, and confirm that the status is **Connected**.

If the status is **Not Connected**, then the LAN drop may not be active, or the network cable may be malfunctioning. Consult your system support person for a solution, and then print another network setup page.

Checking the status of parts and supplies

A message appears on the printer display when a replacement supply item is needed or when maintenance is required.

Checking the status of parts and supplies on the printer control panel

From the printer control panel, navigate to:

 > **Status/Supplies** >  > **View Supplies** > 

Checking the status of parts and supplies from the Embedded Web Server

Note: Make sure the computer and printer are connected to the same network.

- 1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address in the TCP/IP section in the Network/Ports menu. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

- 2 Click **Device Status** > **More Details**.

Saving energy

Using Eco-mode

Use Eco-Mode to quickly select one or more ways to reduce your printer's environmental impact.

- 1 From the printer control panel, navigate to:

 > **Settings** > **Settings** >  > **General Settings** >  > **Eco-Mode** >  > select the setting you want

Use	To
Off	Use the factory default settings for all settings associated with Eco-Mode. This setting supports the performance specifications for your printer.
Energy	Reduce energy use, especially when the printer is idle. <ul style="list-style-type: none"> • Printer engine motors do not start until a job is ready to print. You may notice a short delay before the first page is printed. • The printer enters Sleep mode after one minute of inactivity.
Energy/Paper	Use all the settings associated with Energy and Paper modes.
Plain Paper	<ul style="list-style-type: none"> • Enable the automatic two-sided (duplex) feature. • Turn off print log features.

2 Press .

Reducing printer noise

Use Quiet mode to reduce the printer noise.

1 From the printer control panel, navigate to:

 > **Settings** > **Settings** >  > **General Settings** >  > **Quiet Mode** > 

2 Select a setting you want.

Use	To
On	<p>Reduce printer noise.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Print jobs will process at a reduced speed. • Printer engine motors do not start until a document is ready to print. There is a short delay before the first page is printed.
Off	<p>Use factory default settings.</p> <p>Note: This setting supports the performance specifications of the printer.</p>

3 Press .

Adjusting Sleep mode

To save energy, decrease the number of minutes before the printer enters Sleep mode. Select from 1 to 120. The factory default setting is 30 minutes.

Note: The printer still accepts print jobs when in Sleep mode.

Using the Embedded Web Server

1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address in the TCP/IP section in the Network/Ports menu. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

2 Navigate to:

Settings > General Settings > Timeouts

3 In the Sleep Mode field, enter the number of minutes you want the printer to wait before it enters Sleep mode.

4 Click **Submit**.

Using the printer control panel

1 From the printer control panel, navigate to:

 > **Settings** >  > **Settings** >  > **General Settings** >  > **Timeouts** >  > **Sleep Mode** > 

2 In the Sleep Mode field, select the number of minutes you want the printer to wait before it enters Sleep mode.

3 Press .

Using Hibernate mode

Hibernate is an ultra-low-power operating mode. When operating in Hibernate mode, all other systems and devices are powered down safely.

Notes:

- Make sure to wake the printer from Hibernate mode before sending a print job. A hard reset or a long press of the Sleep button wakes the printer from Hibernate mode.
- The Hibernate mode can be scheduled. For more information, see “Using Schedule Power Modes” on page 65.
- If the printer is in Hibernate mode, the Embedded Web Server is disabled.

Using the Embedded Web Server

1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address in the TCP/IP section in the Network/Ports menu. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If your are using a proxy server, then temporarily disable it to load the Web page correctly.

2 Click **Settings > General Settings > Sleep Button Settings**.

3 From the “Press Sleep Button” or “Press and Hold Sleep Button” drop-down menu, select **Hibernate**.

4 Click **Submit**.

Using the printer control panel

1 From the printer control panel, navigate to:

 > Settings >  > Settings >  > General Settings > 

2 Press the arrow buttons until **Press Sleep Button** or **Press and Hold Sleep Button** appears, and then press .

3 Press the arrow buttons until **Hibernate** appears, and then press .

Notes:

- When Press Sleep Button is set to Hibernate, a short press of the Sleep button sets the printer to Hibernate mode.
- When Press and Hold Sleep Button is set to Hibernate, a long press of the Sleep button sets the printer to Hibernate mode.

Setting Hibernate Timeout

Hibernate Timeout lets you set the amount of time the printer waits after a print job is processed before it goes into a reduced power state.

Using the Embedded Web Server

1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address in the TCP/IP section in the Network/Ports menu. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

2 Click **Settings > General Settings > Timeouts**.

3 From the Hibernate Timeout menu, select the number of hours, days, weeks, or months you want for the printer to wait before it goes into a reduced power state.

4 Click **Submit**.

Using the printer control panel

1 From the printer control panel, navigate to:

 > Settings >  > Settings >  > General Settings >  > Timeouts >  > Hibernate Timeout > 

2 Select the amount of time the printer waits after a print job is processed before it enters Hibernate mode.

3 Press .

Using Schedule Power Modes

Schedule Power Modes lets you schedule when the printer goes into a reduced power state or into the Ready state.

Note: This feature is available only in network printers or printers connected to print servers.

Using the Embedded Web Server

- 1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address in the TCP/IP section in the Network/Ports menu. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

- 2 Click **Settings > General Settings > Schedule Power Modes**.

- 3 From the Action menu, select the power mode.

- 4 From the Time menu, select the time.

- 5 From the Day(s) menu, select the day or days.

- 6 Click **Add**.

Adjusting the brightness of the printer display

To save energy, or if you have trouble reading the display, adjust its brightness settings.

Using the Embedded Web Server

- 1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address in the TCP/IP section in the Network/Ports menu. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

- 2 Click **Settings > General Settings**.

- 3 In the Screen Brightness field, enter the brightness percentage you want for the display.

- 4 Click **Submit**.

Restoring factory default settings

If you want to keep a list of the current menu settings for reference, then print a menu settings page before restoring the factory default settings. For more information, see “Printing a menu settings page” on page 60.

If you want a more comprehensive method of restoring the printer factory default settings, then perform the Wipe All Settings option. For more information, see “Erasing non-volatile memory” on page 67.

Warning—Potential Damage: Restoring factory defaults returns most printer settings to the original factory default settings. Exceptions include the display language, custom sizes and messages, and network/port menu settings. All downloads stored in the RAM are deleted. Downloads stored in the flash memory or in printer hard disk are not affected.

From the printer control panel, navigate to:

Home > Settings > Settings > OK > General Settings > OK > Factory Defaults > OK > Restore Now > OK

Securing the printer

Using the security lock feature

The printer is equipped with a security lock feature. Attach a security lock compatible with most laptop computers in the location shown to secure the printer in place.



Statement of Volatility

Your printer contains various types of memory that can store device and network settings, and user data.

Type of memory	Description
Volatile memory	Your printer uses standard <i>random access memory</i> (RAM) to temporarily buffer user data during simple print jobs.
Non-volatile memory	Your printer may use two forms of non-volatile memory: EEPROM and NAND (flash memory). Both types are used to store operating system, device settings, and network information.

Erase the content of any installed printer memory in the following circumstances:

- The printer is being decommissioned.
- The printer is being moved to a different department or location.
- The printer is being serviced by someone from outside your organization.
- The printer is being removed from your premises for service.
- The printer is being sold to another organization.

Erasing volatile memory

The volatile memory (RAM) installed in your printer requires a power source to retain information. To erase the buffered data, turn off the printer.

Erasing non-volatile memory

Erase individual settings, device and network settings, security settings, and embedded solutions by following these steps:

- 1 Turn off the printer.
- 2 Hold down **2** and **6** on the keypad while turning the printer on. Release the buttons only when the screen with the progress bar appears.

The printer performs a power-on sequence, and then the Configuration menu appears. When the printer is fully turned on, a list of functions appears on the printer display.

- 3 Press the up or down arrow button until **Wipe All Settings** appears.

The printer will restart several times during this process.

Note: Wipe All Settings securely removes device settings, solutions, jobs, and passwords from the printer memory.

- 4 Navigate to:

Back > Exit Config Menu

The printer will perform a power-on reset, and then return to normal operating mode.

Finding printer security information

In high-security environments, it may be necessary to take additional steps to make sure that confidential data stored in the printer cannot be accessed by unauthorized persons. For more information, visit the

[Lexmark security Web page](#).

You can also see the *Embedded Web Server — Security: Administrator's Guide* for additional information:

- 1 Go to www.lexmark.com, and then navigate to **Support & Downloads** > select your printer.
- 2 Click the **Manuals** tab, and then select *Embedded Web Server — Security: Administrator's Guide*.

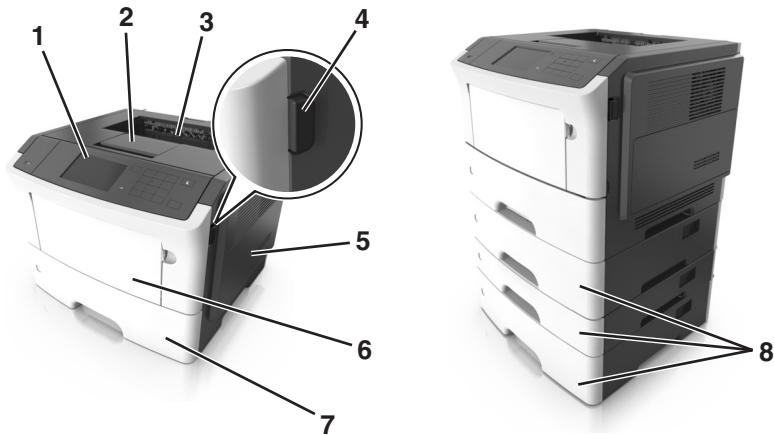
Using MS610de

Learning about the printer

Printer configurations

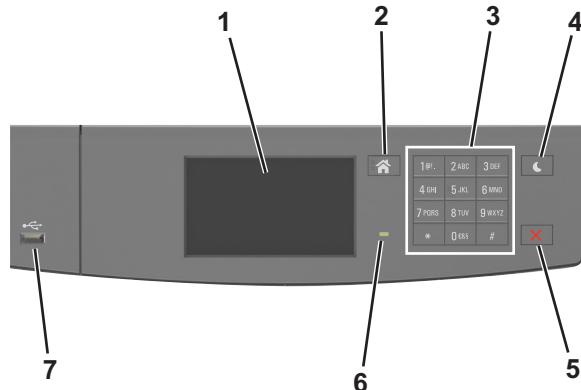
 **CAUTION—POTENTIAL INJURY:** To reduce the risk of equipment instability, load each tray separately. Keep all other trays closed until needed.

Basic and configured models



1	Printer control panel
2	Paper stop
3	Standard bin
4	Front door release button
5	Controller board access door
6	100-sheet multipurpose feeder
7	Standard 550-sheet tray
8	Optional 250- or 550-sheet tray

Using the printer control panel



	Use the	To
1	Display	<ul style="list-style-type: none"> View the printer status and messages. Set up and operate the printer.
2	Home button	Go to the home screen.
3	Keypad	Enter numbers, letters, or symbols.
4	Sleep button	<p>Enable Sleep mode or Hibernate mode. The following actions wake the printer from Sleep mode:</p> <ul style="list-style-type: none"> Touching the screen Pressing any hard button Opening a tray or the front door Sending a print job from the computer Performing a power-on reset using the main power switch Attaching a device to the USB port
5	Stop or cancel button	Stop all printer activity.
6	Indicator light	Check the status of the printer.
7	USB port	Connect a flash drive to the printer. Note: Only the front USB port supports flash drives.

Understanding the colors of the Sleep button and indicator lights

The colors of the Sleep button and indicator lights on the printer control panel signify a certain printer status or condition.

Indicator light	Printer status
Off	The printer is off or in Hibernate mode.
Blinking green	The printer is warming up, processing data, or printing.
Solid green	The printer is on, but idle.
Blinking red	The printer requires user intervention.

Sleep button light	Printer status
Off	The printer is off, idle or in Ready state.
Solid amber	The printer is in Sleep mode.
Blinking amber	The printer is entering or waking from Hibernate mode.
Blinking amber for 0.1 second, then goes completely off for 1.9 seconds in a slow, pulsing pattern	The printer is in Hibernate mode.

Understanding the home screen

When the printer is turned on, the display shows a basic screen, referred to as the home screen. Use the home screen buttons and icons to initiate an action.

Note: Your home screen may vary depending on your home screen customization settings, administrative setup, and active embedded solutions.



Touch	To
1 Change Language	Change the primary language of the printer.
2 Bookmarks	Create, organize, and save a set of bookmarks (URLs) into a tree view of folders and file links. Note: The tree view does not include bookmarks created within Forms and Favorites, and the ones in the tree are not usable in Forms and Favorites.
3 Held Jobs	Display all current held jobs.
4 USB	View, select, or print photos and documents from a flash drive. Note: This icon appears only when you return to the home screen while a memory card or flash drive is connected to the printer.
5 Menus	Access printer menus. Note: These menus are available only when the printer is in ready state.
6 Status message bar	<ul style="list-style-type: none"> Show the current printer status such as Ready or Busy. Show printer conditions such as Imaging unit low or Cartridge Low. Show intervention messages and the instructions on how to clear them.

Touch	To
7	Status/Supplies
8	Tips

This may also appear on the home screen:

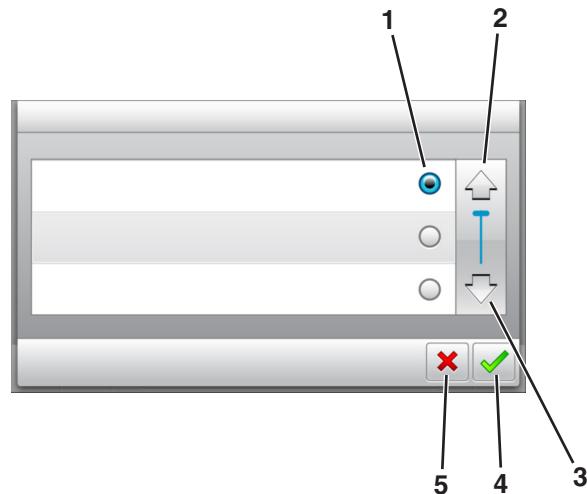
Touch	To
Search Held Jobs	Search current held jobs.
Jobs by user	Access print jobs saved by user.
Profiles and Solutions	Access profiles and solutions.

Features

Feature	Description
Attendance message alert 	If an attendance message affects a function, then this icon appears and the red indicator light blinks.
Warning 	If an error condition occurs, then this icon appears.
Printer IP address Example: 123.123.123.123	The IP address of your printer is located at the top left corner of the home screen and appears as four sets of numbers separated by periods. You can use the IP address when accessing the Embedded Web Server to view and remotely configure printer settings even when you are not physically near the printer.

Using the touch-screen buttons

Note: Your home screen may vary, depending on your home screen customization settings, administrative setup, and active embedded solutions.



	Touch the	To
1	Radio button	Select or clear an item.
2	Up arrow	Scroll up.
3	Down arrow	Scroll down.
4	Accept button	Save a setting.
5	Cancel button	<ul style="list-style-type: none"> • Cancel an action or a selection. • Return to the previous screen.

Touch	To
	Return to the home screen.
	Open a context-sensitive Help dialog on the printer control panel.
	Scroll to the left.
	Scroll to the right.

Attaching cables

Connect the printer to the computer using a USB cable or parallel cable, or to the network using an Ethernet cable.

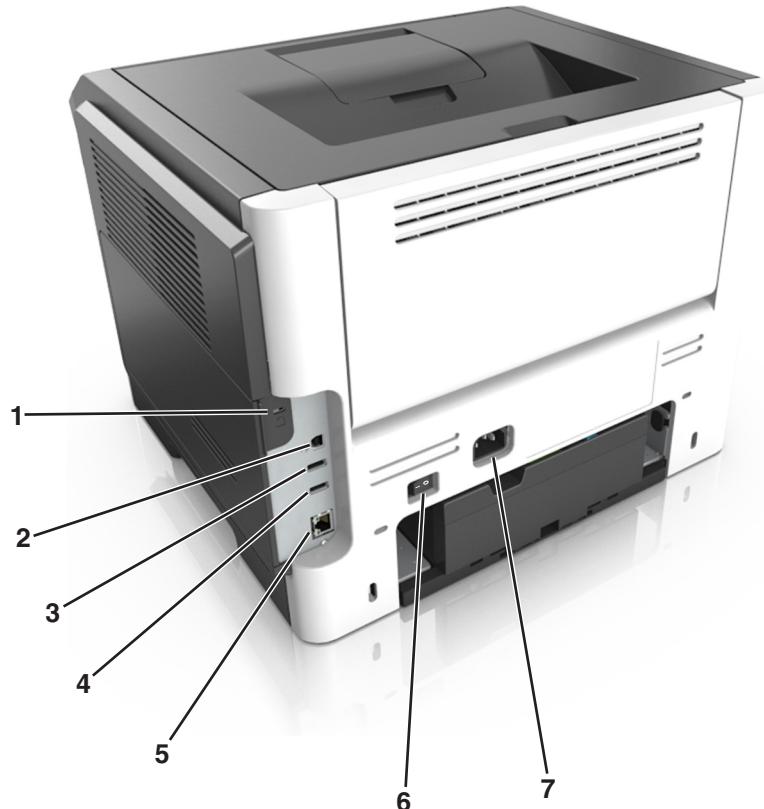
Make sure to match the following:

- The USB symbol on the cable with the USB symbol on the printer
- The appropriate parallel cable with the parallel port

Note: The parallel port is available only when an Internal Solutions Port is installed.

- The appropriate Ethernet cable with the Ethernet port

Warning—Potential Damage: Do not touch the USB cable, any network adapter, or the printer in the area shown while actively printing. Loss of data or a malfunction can occur.

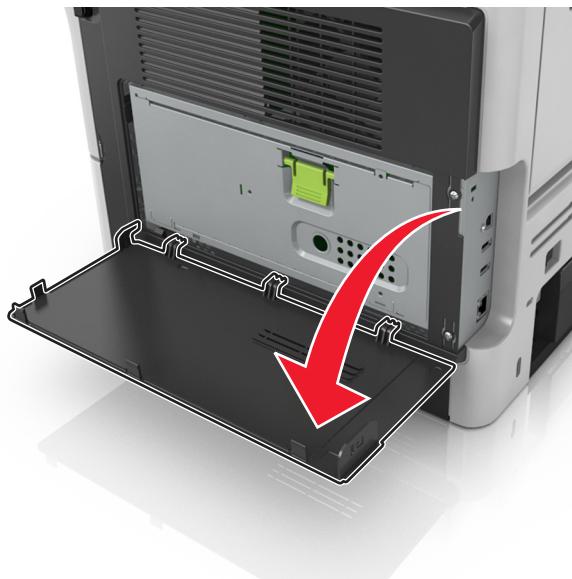


	Use the	To
1	Security slot	Attach a lock that will secure the controller board.
2	USB printer port	Connect the printer to a computer.
3	USB port	Connect a flash drive to the printer.
4	USB port	Attach an optional wireless network adapter.
5	Ethernet port	Connect the printer to an Ethernet network.
6	Power switch	Turn on or off the printer.
7	Printer power cord socket	Connect the printer to an electrical outlet.

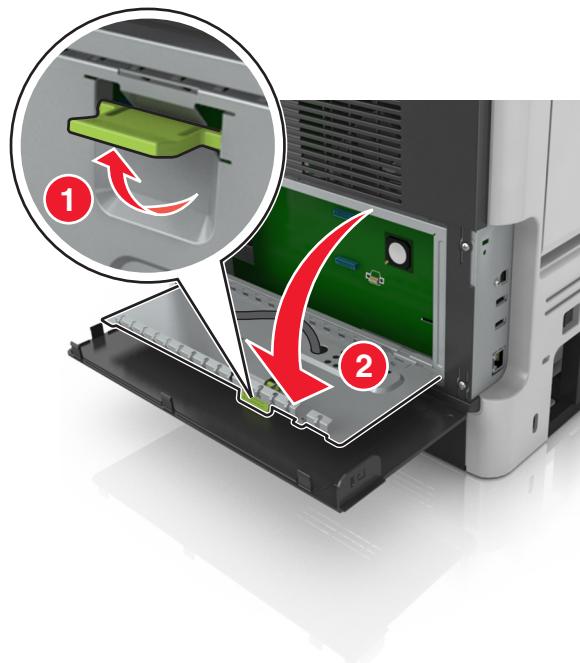
Accessing the controller board

CAUTION—SHOCK HAZARD: If you are accessing the controller board or installing optional hardware or memory devices sometime after setting up the printer, then turn the printer off, and unplug the power cord from the electrical outlet before continuing. If you have any other devices attached to the printer, then turn them off as well, and unplug any cables going into the printer.

- 1 Open the controller board access door.

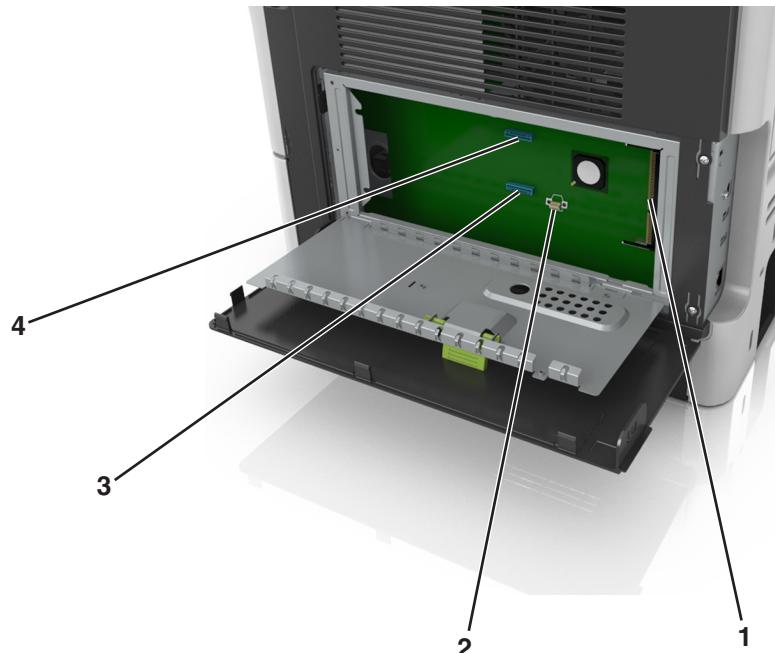


- 2 Open the controller board shield using the green handle.



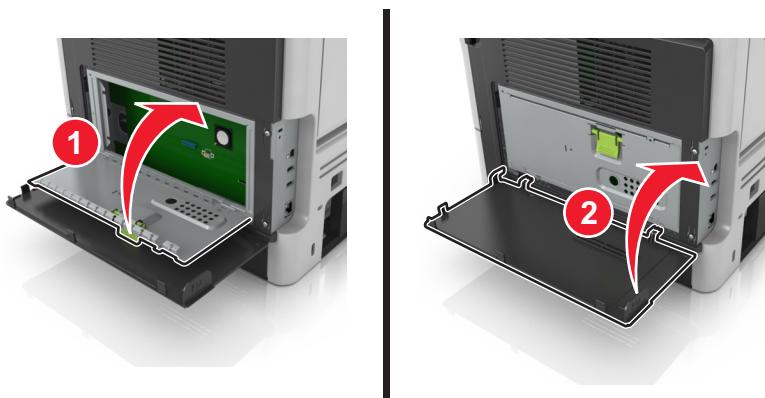
- 3 Use the following illustration to locate the appropriate connector.

Warning—Potential Damage: Controller board electronic components are easily damaged by static electricity. Touch a metal surface on the printer before touching any controller board electronic components or connectors.



1	Memory card connector
2	Option card connector
3	Printer hard disk connector
4	Internal Solutions Port connector

- 4 Close the controller board shield, and then close the controller board access door.



Setting up and using the home screen applications

Notes:

- Your home screen may vary depending on your home screen customization settings, administrative setup, and active embedded applications. Some applications are supported only in select printer models.
- There may be additional solutions and applications available for purchase. For more information, visit <http://support.lexmark.com> or contact the place where you purchased the printer.

Finding the IP address of the computer

Note: Make sure that you know how your printer and computer are connected to the network (Ethernet or wireless).

The computer IP address is required when setting up home screen applications, such as:

- Forms and Favorites
- Multi Send
- Scan to Network

For Windows users

- 1 Open the command window.

In Windows 8

From the Search charm, type **run**, and then navigate to:

Apps list > Run > type **cmd** > OK

In Windows 7 or earlier

- a Click  or click **Start**, and then click **Run**.
- b In the Start Search or Run dialog, type **cmd**.
- c Press **Enter**, or click **OK**.

- 2 Type **ipconfig**, and then click **Go** or press **Enter**.

Note: Type **ipconfig /all** to see additional useful information.

- 3 Look for **IP Address**.

The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.

For Macintosh users

Note: This is applicable only in Mac OS X version 10.5 or later.

- 1 From the Apple menu, navigate to:
System Preferences > Network
- 2 Click **Ethernet**, **Wi-Fi**, or **AirPort**.
- 3 Click **Advanced > TCP/IP**.
- 4 Look for **IPv4 Address**.

Finding the IP address of the printer

Note: Make sure your printer is connected to a network or to a print server.

You can find the printer IP address:

- From the top left corner of the printer home screen.
- From the TCP/IP section in the Network/Ports menu.
- By printing a network setup page or menu settings page, and then finding the TCP/IP section.

Note: An IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.

Accessing the Embedded Web Server

The Embedded Web Server is the printer Web page that lets you view and remotely configure printer settings even when you are not physically near the printer.

1 Obtain the printer IP address:

- From the printer control panel home screen
- From the TCP/IP section in the Network/Ports menu
- By printing a network setup page or menu settings page, and then finding the TCP/IP section

Note: An IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.

2 Open a Web browser, and then type the printer IP address in the address field.

3 Press **Enter**.

Note: If you are using a proxy server, then temporarily disable it to load the Web page correctly.

Customizing the home screen

1 Open a Web browser, and then type the printer IP address in the address field.

Note: View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.

2 Do one or more of the following:

- Show or hide the icons of basic printer functions.
 - a Click **Settings > General Settings > Home screen customization**.
 - b Select the check boxes to specify which icons appear on the home screen.

Note: If you clear a check box beside an icon, then the icon does not appear on the home screen.

c Click **Submit**.

- Customize the icon for an application. For more information, see “Finding information about the home screen applications” on page 78 or see the documentation that came with the application.

Activating the home screen applications

Finding information about the home screen applications

Your printer comes with preinstalled home screen applications. Before you can use these applications, you must first activate and set up these applications using the Embedded Web Server. For more information on accessing the Embedded Web Server, see “Accessing the Embedded Web Server” on page 77.

For more information on configuring and using the home screen applications, do the following:

- 1 Go to <http://support.lexmark.com>.
- 2 Click **Software Solutions**, and then select either of the following:
 - **Scan to Network**—This lets you find information about the Scan to Network application.
 - **Other Applications**—This lets you find information about the other applications.
- 3 Click the **Manuals** tab, and then select the document for the home screen application.

Using Background and Idle Screen

Icon	Description
	The application lets you customize the background and idle screen of your printer home screen.

- 1 From the home screen, navigate to:
Change Background > select background to use
- 2 Touch .

Setting up Forms and Favorites

Icon	Description
	The application helps you simplify and streamline work processes by letting you quickly find and print frequently used online forms directly from the printer home screen. Note: The printer must have permission to access the network folder, FTP site, or Web site where the bookmark is stored. From the computer where the bookmark is stored, use sharing, security, and firewall settings to allow the printer at least a <i>read</i> access. For help, see the documentation that came with your operating system.

- 1 Open a Web browser, and then type the printer IP address in the address field.

Note: View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.

- 2 Click **Settings > Apps > Apps Management > Forms and Favorites.**
- 3 Define the bookmarks, and then customize the settings.
- 4 Click **Apply.**

To use the application, touch **Forms and Favorites** on the printer home screen, and then navigate through form categories, or search for forms based on a form number, name, or description.

Understanding Eco-Settings

Icon	Description
	The application lets you easily manage energy consumption, noise, toner, and paper usage settings to help reduce the environmental impact of your printer.

Setting up Remote Operator Panel

This application enables you to interact with the printer control panel even when you are not physically near the network printer. From your computer, you can view the printer status, release held print jobs, create bookmarks, and do other print-related tasks.

- 1 Open a Web browser, and then type the printer IP address in the address field.

Note: View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.

- 2 Click **Settings > Remote Operator Panel Settings.**
- 3 Select the **Enable** check box, and then customize the settings.
- 4 Click **Submit.**

To use the application, click **Remote Operator Panel > Launch VNC Applet.**

Exporting and importing a configuration

You can export configuration settings into a text file, and then import the file to apply the settings to other printers.

- 1 Open a Web browser, and then type the printer IP address in the address field.
- Note:** View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- 2 Click **Settings > Apps > Apps Management.**

- 3 From the list of installed applications, click the name of the application you want to configure.
- 4 Click **Configure**, and then do one of the following:
 - To export a configuration to a file, click **Export**, and then follow the instructions on the computer screen to save the configuration file.

Notes:

- When saving the configuration file, you can type a unique file name or use the default name.
- If a "JVM Out of Memory" error occurs, then repeat the export process until the configuration file is saved.
- To import a configuration from a file, click **Import**, and then browse to the saved configuration file that was exported from a previously configured printer.

Notes:

- Before importing the configuration file, you can choose to preview it first or load it directly.
- If a timeout occurs and a blank screen appears, then refresh the Web browser, and then click **Apply**.

Loading paper and specialty media

The selection and handling of paper and specialty media can affect how reliably documents print. For more information, see “[Avoiding jams](#)” on page 181 and “[Storing paper](#)” on page 118.

Setting the paper size and type

From the home screen navigate to:

 > **Paper Menu** > **Paper Size/Type** > select a tray > select the paper size or type > 

Configuring Universal paper settings

The Universal paper size is a user-defined setting that lets you print on paper sizes that are not preset in the printer menus.

Notes:

- The smallest Universal paper size is 6 x 127 mm (3 x 5 inches), and is supported only from the multipurpose feeder.
- The largest Universal paper size is 216 x 355.6 mm (8.5 x 14 inches), and is supported from all paper sources.

- 1 From the printer control panel, navigate to:

 > **Paper Menu** > **Universal Setup** > **Units of Measure** > select a unit of measure > 

- 2 Touch **Portrait Width** or **Portrait Height**.

- 3 Select the width or height, and then touch .

Using the standard bin and paper stop

The standard bin holds up to 150 sheets of 75-g/m² (20-lb) paper. It collects prints facedown. The standard bin includes a paper stop that keeps paper from sliding out the front of the bin as it stacks.

To open the paper stop, pull it so that it flips forward.



Note: When moving the printer to another location, make sure the paper stop is closed.

Loading trays

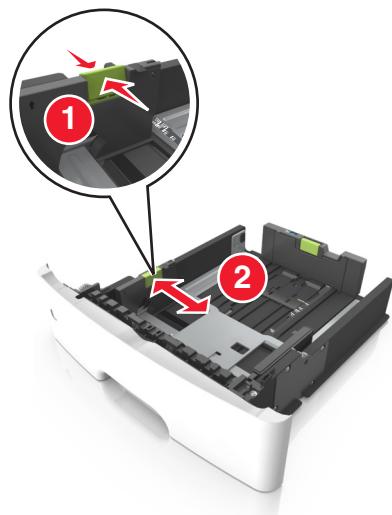
⚠ CAUTION—POTENTIAL INJURY: To reduce the risk of equipment instability, load each tray separately. Keep all other trays closed until needed.

- 1 Pull out the tray completely.

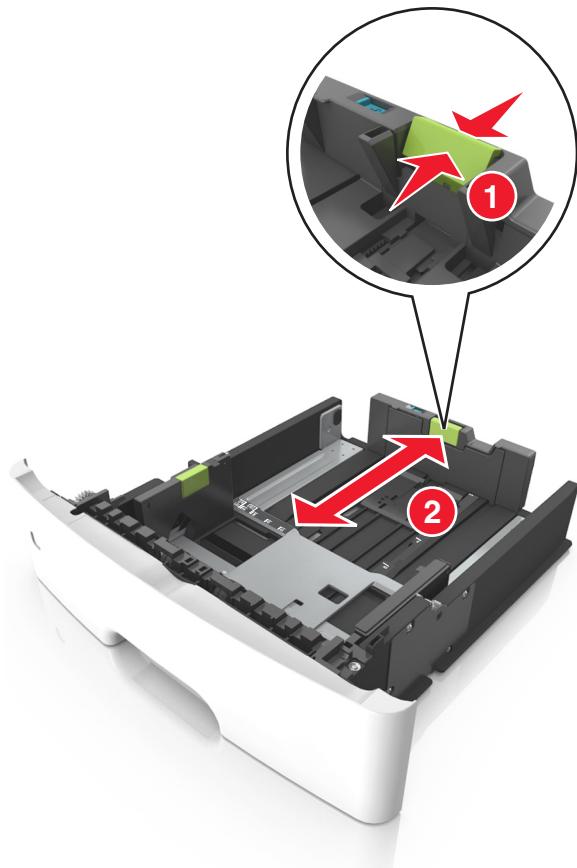
Note: Do not remove trays while a job prints or while **Busy** appears on the printer display. Doing so may cause a jam.



2 Squeeze and then slide the width guide tab to the correct position for the size of the paper you are loading.

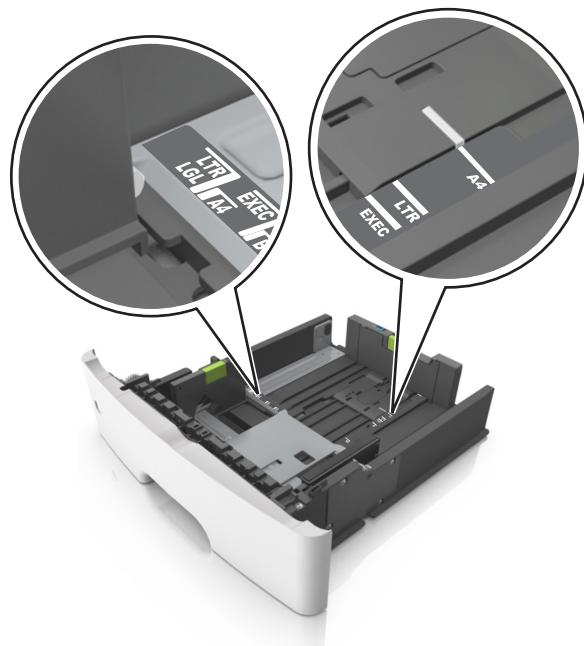


3 Squeeze and then slide the length guide tab to the correct position for the size of the paper you are loading.

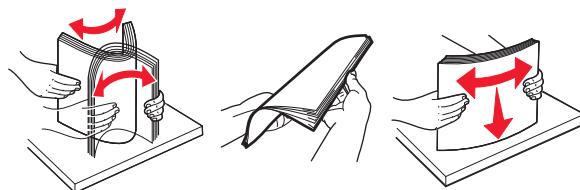


Notes:

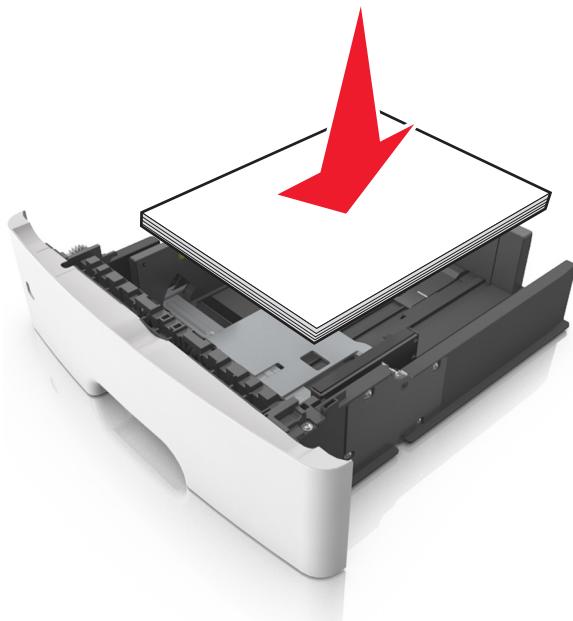
- For some paper sizes like letter, legal, and A4, squeeze and slide the length guide tab backward to accommodate their length.
- When loading legal-size paper, the length guide extends beyond the base leaving the paper exposed to dust. To protect the paper from dust, you can purchase a dust cover separately. For more information, contact customer support.
- If you are loading A6-size paper in the standard tray, then squeeze and then slide the length guide tab toward the center of the tray to the A6-size position.
- Make sure the width and length guides are aligned with the paper size indicators on the bottom of the tray.



- 4** Flex the sheets back and forth to loosen them, and then fan them. Do not fold or crease the paper. Straighten the edges on a level surface.

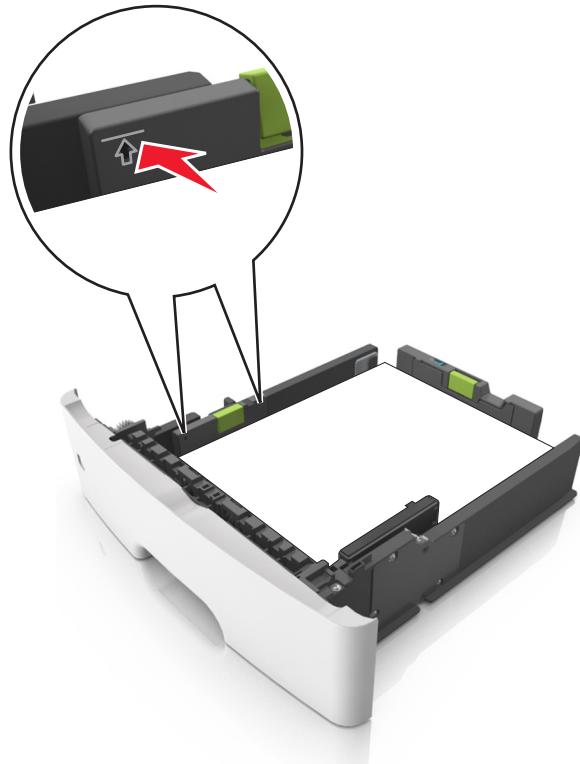


- 5** Load the paper stack.



Notes:

- Load with the printable side facedown when using recycled or preprinted paper.
- Load prepunched paper with the holes on the top edge toward the front of the tray.
- Load letterhead facedown, with the top edge of the sheet toward the front of the tray. For two-sided printing, load letterhead faceup with the bottom edge of the sheet toward the front of the tray.
- Make sure the paper is below the maximum paper fill indicator located on the side of the width guide.



6 Insert the tray.



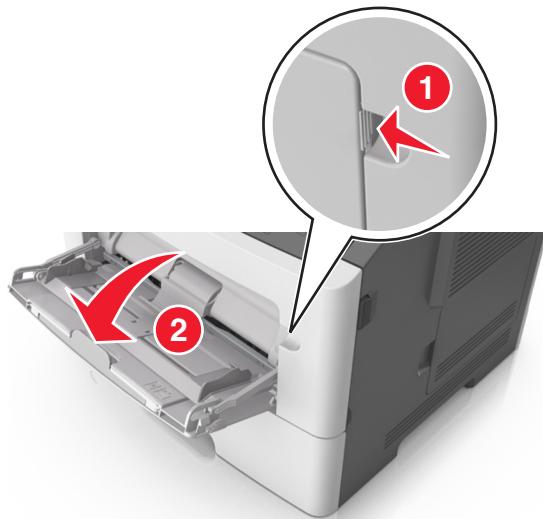
7 From the printer control panel, set the paper size and paper type in the Paper menu to match the paper loaded in the tray.

Note: Set the correct paper size and paper type to avoid paper jams and print quality problems.

Loading the multipurpose feeder

Use the multipurpose feeder when printing on different paper sizes and types or specialty media, such as card stock, transparencies, paper labels, and envelopes. You can also use it for single-page print jobs on letterhead.

- 1 Open the multipurpose feeder.



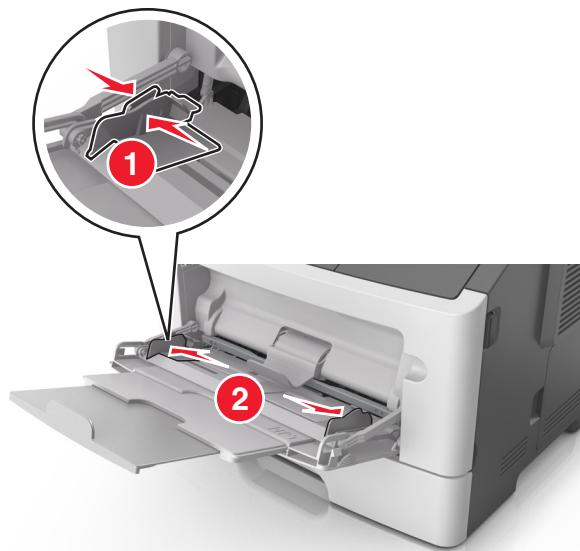
- a Pull the multipurpose feeder extender.



- b Pull the extender gently so that the multipurpose feeder is fully extended and open.

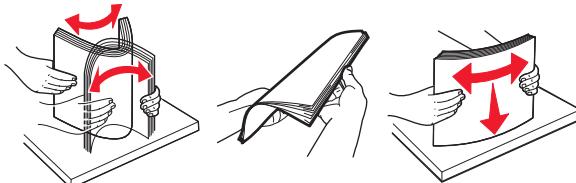


2 Squeeze the tab on the left width guide, and then move the guides for the paper you are loading.



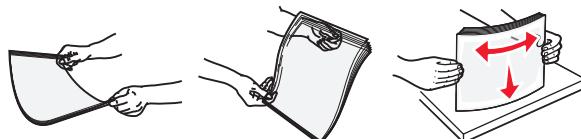
3 Prepare the paper or specialty media for loading.

- Flex sheets of paper back and forth to loosen them, and then fan them. Do not fold or crease the paper. Straighten the edges on a level surface.



- Hold transparencies by the edges. Flex the stack of transparencies back and forth to loosen them, and then fan them. Straighten the edges on a level surface.

Note: Avoid touching the printable side of the transparencies. Be careful not to scratch them.



- Flex the stack of envelopes back and forth to loosen them, and then fan them. Straighten the edges on a level surface.

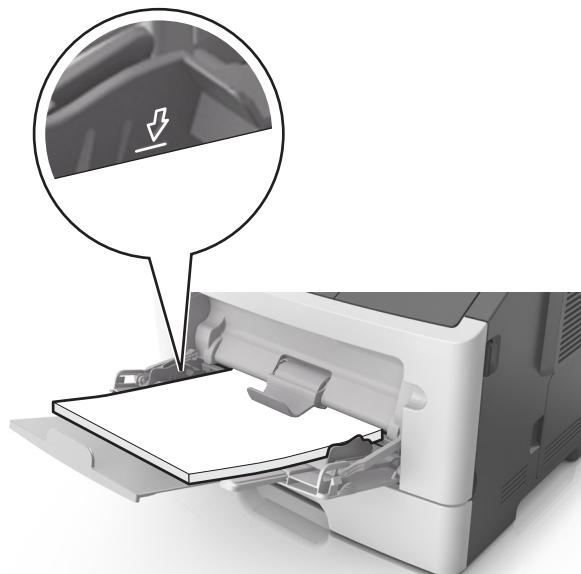


4 Load the paper or specialty media.

Notes:

- Do not force paper or specialty media into the multipurpose feeder.

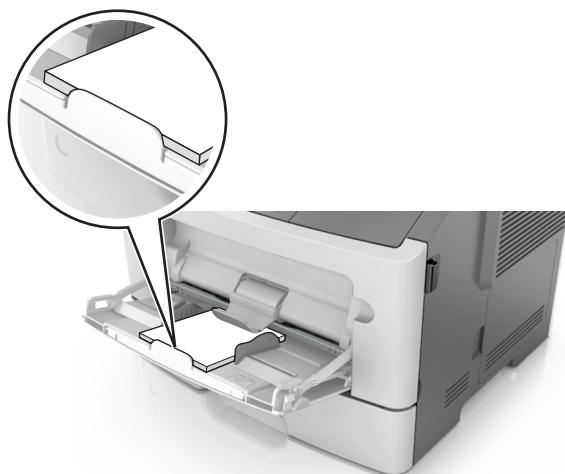
- Make sure the paper or specialty media is below the maximum paper fill indicator located on the paper guides. Overfilling may cause paper jams.



- Load paper, transparencies, and card stock with the recommended printable side faceup and the top edge entering the printer first. For more information on loading transparencies, see the packaging that the transparencies came in.



Note: When loading A6-size paper, make sure the multipurpose feeder extender rests lightly against the edge of the paper so that the last few sheets of paper remain in place.



- Load letterhead faceup with the top edge entering the printer first. For two-sided (duplex) printing, load letterhead facedown with the bottom edge entering the printer first.



- Load envelopes with the flap on the left side facedown.



Warning—Potential Damage: Never use envelopes with stamps, clasps, snaps, windows, coated linings, or self-stick adhesives. These envelopes may severely damage the printer.

- 5 From the printer control panel, set the paper size and paper type in the Paper menu to match the paper or specialty media loaded in the multipurpose feeder.

Linking and unlinking trays

Linking and unlinking trays

- 1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

- 2 Click **Settings > Paper Menu**.

- 3 Change the paper size and type settings for the trays you are linking.

- To link trays, make sure the paper size and type for the tray match that of the other tray.
- To unlink trays, make sure the paper size or type for the tray does *not* match that of the other tray.

- 4 Click **Submit**.

Note: You can also change the paper size and type settings using the printer control panel. For more information, see “Setting the paper size and type” on page 80.

Warning—Potential Damage: Paper loaded in the tray should match the paper type name assigned in the printer. The temperature of the fuser varies according to the specified paper type. Printing issues may occur if settings are not properly configured.

Creating a custom name for a paper type

Using the Embedded Web Server

- 1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

- 2 Click **Settings > Paper Menu > Custom Names**.

- 3 Select a custom name, and then type a custom paper type name.

- 4 Click **Submit**.

- 5 Click **Custom Types**, and then verify if the new custom paper type name has replaced the custom name.

Using the printer control panel

- 1 From the home screen, navigate to:



> **Paper Menu > Custom Names**

- 2 Select a custom name, and then type a custom paper type name.

- 3 Touch

- 4 Touch **Custom Types**, and then verify that the new custom paper type name has replaced the custom name.

Assigning a custom paper type

Using the Embedded Web Server

Assign a custom paper type name to a tray when linking or unlinking trays.

- 1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

- 2 Click **Settings > Paper Menu > Custom Types**.

- 3 Select a custom paper type name, and then select a paper type

Note: Paper is the factory default paper type for all user-defined custom names.

- 4 Click **Submit**.

Using the printer control panel

- 1 From the home screen, navigate to:



> **Paper Menu** > **Custom Types**

- 2 Select a custom paper type name, and then select a paper type

Note: Paper is the factory default paper type for all user-defined custom names.

- 3 Touch

Printing

Printing forms

Use the Forms and Favorites application to quickly and easily access frequently used forms or other information that is regularly printed. Before you can use this application, first set it up on the printer. For more information, see “Setting up Forms and Favorites” on page 78.

- 1 From the printer home screen, navigate to:

Forms and Favorites > select the form from the list > enter the number of copies > adjust other settings

- 2 Depending on your printer model, touch , , or **Submit**.

Printing a document

Printing a document

- 1 From the Paper menu on the printer control panel, set the paper type and size to match the paper loaded.

- 2 Send the print job:

For Windows users

- a With a document open, click **File > Print**.
- b Click **Properties, Preferences, Options, or Setup**.
- c Adjust the settings, if necessary.
- d Click **OK > Print**.

For Macintosh users

- a Customize the settings in the Page Setup dialog:
 - 1 With a document open, choose **File > Page Setup**.
 - 2 Choose a paper size or create a custom size to match the paper loaded.
 - 3 Click **OK**.

b Customize the settings in the Print dialog:

- 1 With a document open, choose **File > Print**.
If necessary, click the disclosure triangle to see more options.
- 2 From the Print dialog and pop-up menus, adjust the settings if necessary.

Note: To print on a specific paper type, adjust the paper type setting to match the paper loaded, or select the appropriate tray or feeder.

- 3 Click **Print**.

Adjusting toner darkness

Using the Embedded Web Server

- 1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

- 2 Click **Settings > Print Settings > Quality Menu > Toner Darkness**.

- 3 Adjust the setting, and then click **Submit**.

Using the printer control panel

- 1 From the home screen, navigate to:



> **Settings > Print Settings > Quality Menu > Toner Darkness**

- 2 Adjust the setting, and then touch .

Printing from a flash drive or mobile device

Printing from a flash drive

Notes:

- Before printing an encrypted PDF file, you will be prompted to type the file password from the printer control panel.
- You cannot print files for which you do not have printing permissions.

1 Insert a flash drive into the USB port.



Notes:

- A flash drive icon appears on the printer home screen when a flash drive is inserted.
- If you insert the flash drive when the printer requires attention, such as when a jam has occurred, then the printer ignores the flash drive.
- If you insert the flash drive while the printer is processing other print jobs, then **Busy** appears. After these print jobs are processed, you may need to view the held jobs list to print documents from the flash drive.

Warning—Potential Damage: Do not touch the printer or the flash drive in the area shown while actively printing, reading, or writing from the memory device. Loss of data can occur.



- 2 From the printer control panel, touch the document you want to print.
- 3 Touch the arrows to specify the number of copies for printing, and then touch **Print**.

Notes:

- Do not remove the flash drive from the USB port until the document has finished printing.
- If you leave the flash drive in the printer after leaving the initial USB menu screen, then touch **Held Jobs** on the home screen to print files from the flash drive.

Supported flash drives and file types

Flash drive	File type
<ul style="list-style-type: none">• Lexar JumpDrive 2.0 Pro (256MB, 512MB, or 1GB sizes)• SanDisk Cruzer Mini (256MB, 512MB, or 1GB sizes) <p>Notes:</p> <ul style="list-style-type: none">• High-speed USB flash drives must support the fullspeed standard. Low-speed USB devices are not supported.• USB flash drives must support the File Allocation Table (FAT) system. Devices formatted with New Technology File System (NTFS) or any other file system are not supported.	<p>Documents:</p> <ul style="list-style-type: none">• .pdf• .xps <p>Images:</p> <ul style="list-style-type: none">• .dcx• .gif• .jpeg or .jpg• .bmp• .pcx• .tiff or .tif• .png• .fls

Printing from a mobile device

To download a compatible mobile printing application, visit www.lexmark.com/mobile.

Note: Mobile printing applications may also be available from your mobile device manufacturer.

Printing confidential and other held jobs

Storing print jobs in the printer

- From the home screen, navigate to:



> Security > Confidential Print > select a print job type

Use	To
Max Invalid PIN	Limit the number of times an invalid PIN can be entered. Note: When the limit is reached, the print jobs for that user name and PIN are deleted.
Confidential Job Expiration	Hold print jobs in the computer until you enter the PIN from the printer control panel. Note: The PIN is set from the computer. It must be four digits, using the numbers 0–9.
Repeat Job Expiration	Print and store print jobs in the printer memory.
Verify Job Expiration	Print one copy of a print job and hold the remaining copies. It lets you examine if the first copy is satisfactory or not. The print job is automatically deleted from the printer memory when all copies are printed.
Reserve Job Expiration	Store print jobs for printing at a later time. Note: The print jobs are held until deleted from the Held Jobs menu.

Notes:

- Confidential, Verify, Reserve, and Repeat print jobs may be deleted if the printer requires extra memory to process additional held jobs.
- You can set the printer to store print jobs in the printer memory until you start the print job from the printer control panel.
- All print jobs that can be initiated by the user at the printer are called *held jobs*.

- Touch .

Printing confidential and other held jobs

Note: Confidential and Verify print jobs are automatically deleted from memory after printing. Repeat and Reserve jobs are *held* in the printer until you delete them.

For Windows users

- With a document open, click **File > Print**.
- Click **Properties, Preferences, Options, or Setup**.
- Click **Print and Hold**.
- Select the print job type (Confidential, Repeat, Reserve, or Verify), and then assign a user name. For a confidential print job, also enter a four-digit PIN.
- Click **OK** or **Print**.

6 From the printer home screen, release the print job.

- For confidential print jobs, navigate to:

Held jobs > select your user name > **Confidential Jobs** > enter the PIN > **Print**

- For other print jobs, navigate to:

Held jobs > select your user name > select the print job > specify the number of copies > **Print**

For Macintosh users

1 With a document open, choose **File > Print**.

If necessary, click the disclosure triangle to see more options.

2 From the print options or Copies & Pages pop-up menu, choose **Job Routing**.

3 Select the print job type (Confidential, Repeat, Reserve, or Verify), and then assign a user name. For a confidential print job, also enter a four-digit PIN.

4 Click **OK** or **Print**.

5 From the printer home screen, release the print job.

- For confidential print jobs, navigate to:

Held jobs > select your user name > **Confidential Jobs** > enter the PIN > **Print**

- For other print jobs, navigate to:

Held jobs > select your user name > select the print job > specify the number of copies > **Print**

Printing information pages

Printing a font sample list

1 From the home screen, navigate to:



> **Reports > Print Fonts**

2 Touch **PCL Fonts** or **PostScript Fonts**.

Printing a directory list

A directory list shows the resources stored in a flash memory or on the printer hard disk.

From the home screen, navigate to:



> **Reports > Print Directory**

Cancelling a print job

Cancelling a print job from the printer control panel

- 1 From the printer control panel, touch **Cancel Job** or press  on the keypad.
- 2 Touch the print job you want to cancel, and then touch **Delete Selected Jobs**.

Note: If you press  on the keypad, then touch **Resume** to return to the home screen.

Cancelling a print job from the computer

For Windows users

- 1 Open the printers folder.

In Windows 8

From the Search charm, type **Run**, and then navigate to:

Apps list > **Run** > type **control printers** > **OK**

In Windows 7 or earlier

- a Click , or click **Start** and then click **Run**.
- b In the Start Search or Run dialog, type **control printers**.
- c Press **Enter**, or click **OK**.

- 2 Double-click the printer icon.

- 3 Select the print job you want to cancel.

- 4 Click **Delete**.

For Macintosh users

- 1 From the Apple menu, navigate to either of the following:
 - **System Preferences** > **Print & Scan** > select your printer > **Open Print Queue**
 - **System Preferences** > **Print & Fax** > select your printer > **Open Print Queue**
- 2 From the printer window, select the print job you want to cancel, and then delete it.

Managing the printer

Setting up serial printing

Use serial printing to print when the computer is far from the printer or to print at a reduced speed.

After installing the serial or communication (COM) port, configure the printer and the computer. Make sure you have connected the serial cable to the COM port on your printer.

- 1** Set the parameters in the printer.
 - a** From the printer control panel, navigate to the menu for the port settings.
 - b** Locate the menu for the serial port settings, and then adjust the settings, if necessary.
 - c** Save the modified settings, and then print a menu settings page.
- 2** Install the printer driver.
 - a** Obtain a copy of the software installer package.
 - From the *Software and Documentation CD* that came with your printer
 - From our Web site:
Go to www.lexmark.com, and then navigate to:
SUPPORT & DOWNLOADS > select your printer > select your operating system > download your software installer package
 - b** Do either of the following:
 - If you are using the *Software and Documentation CD*, then insert the CD and wait for the installation dialog to appear.
If the installation dialog does not appear, then do the following:

In Windows 8

From the Search charm type **run**, and then navigate to:

Apps list > **Run** > type **D:\setup.exe** > **OK**

In Windows 7 or earlier

- 1** Click , or click **Start** and then click **Run**.
- 2** In the Start Search or Run dialog, type **D:\setup.exe**.
- 3** Press **Enter** or click **OK**.

Note: D is the letter of your CD or DVD drive.

- If you are using the downloaded software installer from the Web, then double-click the installer that you have saved in your computer. Wait for the Select Installation Type dialog to appear, and then click **Install**.

Note: If you are prompted to run your software installer package, then click **Run**.

- c** Click **Install**.
- d** Follow the instructions on the computer screen.
- e** Select **Advanced**, and then click **Continue**.
- f** From the Configure Printer Connection dialog, select a port.
- g** If the port is not in the list, then click **Refresh**, or navigate to:
Add port > select a port type > enter the necessary information > **OK**
- h** Click **Continue** > **Finish**.

- 3** Set the COM port parameters.

After installing the printer driver, set the serial parameters in the COM port assigned to the printer driver.

Note: Make sure the serial parameters in the COM port match the serial parameters you set in the printer.

- a** Open Device Manager.

In Windows 8

From the Search charm, type **run** and then navigate to:

Apps list > **Run** > type **devmgmt.msc** > **OK**

In Windows 7 or earlier

- 1 Click , or click **Start** and then click **Run**.
 - 2 In the Start Search or Run dialog, type **devmgmt.msc**.
 - 3 Press **Enter** or click **OK**.
- b** Double-click **Ports (COM & LPT)** to expand the list of available ports.
- c** Do either of the following:
- Press and hold the COM port where you attached the serial cable to your computer (example: COM1).
 - Right-click the COM port where you attached the serial cable to your computer (example: COM1).
- d** From the menu that appears, select **Properties**.
- e** On the Port Settings tab, set the serial parameters to the same serial parameters set in the printer.
Check the serial heading of the menu settings page for the printer settings.
- f** Click **OK**, and then close all the dialogs.
- g** Print a test page to verify printer installation.

Changing port settings after installing a new network Internal Solutions Port

When a new Lexmark Internal Solutions Port (ISP) is installed in the printer, the printer configurations on computers that access the printer must be updated since the printer will be assigned a new IP address. All computers that access the printer must be updated with this new IP address.

Notes:

- If the printer has a static IP address, then you do not need to make any changes to the computer configurations.
- If the computers are configured to use the network name, instead of an IP address, then you do not need to make any changes to your computer configurations.
- If you are adding a wireless ISP to a printer previously configured for an Ethernet connection, then make sure the printer is disconnected from the Ethernet network when you configure the printer to operate wirelessly. If the printer is connected to the Ethernet network, then the wireless configuration completes, but the wireless ISP is inactive. To activate the wireless ISP, disconnect the printer from the Ethernet network, turn off the printer, and then turn it back on.
- Only one network connection is active at a time. To switch between Ethernet and wireless connection types, turn off the printer, connect the cable (to switch to an Ethernet connection) or disconnect the cable (to switch to a wireless connection), and then turn the printer back on.

For Windows users

- 1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address on the printer control panel. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.

- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

2 Open the printers folder.

In Windows 8

From the Search charm, type **Run** and then navigate to:

Apps list > **Run** > type **control printers** > **OK**

In Windows 7 or earlier

- a Click , or click **Start** and then click **Run**.
- b In the Start Search or Run dialog, type **control printers**.
- c Press **Enter**, or click **OK**.

3 To select the printer that has changed, do either of the following:

- Press and hold the printer, and then select **Printer properties**.
- Right-click the printer, and then select **Printer properties** (Windows 7 or later) or **Properties** (earlier versions).

Note: If there is more than one copy of the printer, then update all of them with the new IP address.

4 Click the **Ports** tab.

5 Select the port from the list, and then click **Configure Port**.

6 Type the new IP address in the “Printer Name or IP Address” field.

7 Click **OK** > **Close**.

For Macintosh users

1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address on the printer control panel. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

2 Add the printer.

- For IP printing:

a From the Apple menu, navigate to either of the following:

- **System Preferences** > **Print & Scan**
- **System Preferences** > **Print & Fax**

b Click **+**.

c Click the **IP** tab.

d Type the printer IP address in the address field, and then click **Add**.

- For AppleTalk printing:

Notes:

- Make sure AppleTalk is activated on your printer.
- This feature is supported only in Mac OS X version 10.5.

- a From the Apple menu, navigate to:
System Preferences > Print & Fax
- b Click +, and then navigate to:
AppleTalk > select the printer > Add

Finding advanced networking and administrator information

This chapter covers basic administrative support tasks using the Embedded Web Server. For more advanced system support tasks, see the *Networking Guide* on the *Software and Documentation* CD or the *Embedded Web Server — Security: Administrator's Guide* on the Lexmark support Web site at <http://support.lexmark.com>.

Checking the virtual display

- 1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

- 2 Check the virtual display that appears at the top left corner of the screen.

The virtual display works as an actual display would work on a printer control panel.

Configuring supply notifications from the Embedded Web Server

You can determine how you would like to be notified when supplies run nearly low, low, very low, or reach their end-of-life by setting the selectable alerts.

Notes:

- Selectable alerts can be set on the toner cartridge, imaging unit, and maintenance kit.
- All selectable alerts can be set for nearly low, low, and very low supply conditions. Not all selectable alerts can be set for the end-of-life supply condition. E-mail selectable alert is available for all supply conditions.
- The percentage of estimated remaining supply that prompts the alert can be set on some supplies for some supply conditions.

- 1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

- 2 Click **Settings > Print Settings > Supply Notifications**.

- 3 From the drop-down menu for each supply, select one of the following notification options:

Notification	Description
Off	The normal printer behavior for all supplies occurs.
E-mail Only	The printer generates an e-mail when the supply condition is reached. The status of the supply appears on the menus page and status page.
Warning	The printer displays the warning message and generates an e-mail about the status of the supply. The printer does not stop when the supply condition is reached.
Continuable Stop ¹	The printer stops processing jobs when the supply condition is reached, and the user needs to press a button to continue printing.
Non Continuable Stop ^{1,2}	The printer stops processing jobs when the supply condition is reached. The supply must be replaced to continue printing.

¹ The printer generates an e-mail about the status of the supply when supply notification is enabled.
² The printer stops when some supplies become empty to prevent damage.

4 Click **Submit**.

Modifying confidential print settings

1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

2 Click **Settings > Security > Confidential Print Setup**.

3 Modify the settings:

- Set a maximum number of PIN entry attempts. When a user exceeds that number, all of the jobs for that user are deleted.
- Set an expiration time for confidential print jobs. When a user has not printed the jobs within that time, all of the jobs for that user are deleted.

4 Click **Submit** to save the modified settings.

Copying printer settings to other printers

Note: This feature is available only in network printers.

1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

2 Click **Copy Printer Settings**.

3 To change the language, select a language from the drop-down menu, and then click **Click here to submit language**.

4 Click Printer Settings.**5 Type the IP addresses of the source and target printers.**

Note: If you want to add or remove target printers, then click **Add Target IP** or **Remove Target IP**.

6 Click Copy Printer Settings.

Creating a printer control panel PIN

The Panel PIN Protect menu lets you restrict access to the menus from the printer control panel. To restrict access to the menus, create a Personal Identification Number (PIN), and then assign the PIN to each menu.

1 Open a Web browser, and then type the printer IP address in the address field.**Notes:**

- View the printer IP address in the TCP/IP section in the Network/Ports menu. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

2 Click **Settings > Security > Panel PIN Protect.****3 From the Create User PIN or Create Admin PIN section, enter your PIN.**

Note: You can enter up to 16 digits for your PIN.

4 Click **Modify.****5 From any menu in the Administrative Menus, Management, or Function Access sections, select **User PIN Protected**, **Admin PIN Protected**, or **Admin PIN and User PIN Protected**.**

Note: Using Admin PIN, you can still access a menu assigned with User PIN.

6 Click **Submit.**

If you try to access a PIN-protected menu from the printer control panel, then the printer will require you to enter the PIN.

Note: After you enter the last digit of the PIN, make sure to press  from the printer control panel for more than three seconds.

Printing a menu settings page

From the home screen, navigate to:



> Reports > Menu Settings Page

Printing a network setup page

If the printer is attached to a network, then print a network setup page to verify the network connection. This page also provides important information that aids network printing configuration.

- 1 From the home screen, navigate to:



> Reports > Network Setup Page

- 2 Check the first section of the network setup page, and confirm that the status is **Connected**.

If the status is **Not Connected**, then the LAN drop may not be active, or the network cable may be malfunctioning. Consult a system support person for a solution, and then print another network setup page.

Checking the status of parts and supplies

A message appears on the printer display when a replacement supply item is needed or when maintenance is required.

Checking the status of parts and supplies on the printer control panel

From the home screen, touch **Status/Supplies > View Supplies**.

Checking the status of parts and supplies from the Embedded Web Server

Note: Make sure the computer and the printer are connected to the same network.

- 1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address on the home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

- 2 Click **Device Status > More Details**.

Saving energy

Using Eco-Mode

- 1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

- 2 Click **Settings > General Settings > Eco-Mode** > select a setting

Use	To
Off	Use the factory default settings for all settings associated with Eco-Mode. Off supports the performance specifications of the printer.
Energy	Reduce energy use, especially when the printer is idle. <ul style="list-style-type: none"> • Printer engine motors do not start until it is ready to print. You may notice a short delay before the first page is printed. • The printer enters Sleep mode after one minute of inactivity.
Energy/Paper	Use all the settings associated with Energy and Paper modes.
Plain Paper	<ul style="list-style-type: none"> • Enable the automatic two-sided (duplex) feature. • Turn off print log features.

3 Click **Submit**.

Reducing printer noise

Enable Quiet Mode to reduce printer noise.

1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

2 Click **Settings > General Settings > Quiet Mode** > select a setting

Use	To
On	<p>Reduce printer noise.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Print jobs are processed at a reduced speed. • Printer engine motors do not start until a document is ready to print. There will be a short delay before the first page is printed.
Off	<p>Use factory default settings.</p> <p>Note: This setting supports the performance specifications of the printer.</p>

3 Click **Submit**.

Adjusting Sleep mode

To save energy, decrease the number of minutes the printer waits before it enters Sleep mode. Select from 1 to 120. The factory default setting is 30 minutes.

Note: The printer still accepts print jobs when in Sleep mode.

Using the Embedded Web Server

- 1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

- 2 Click **Settings > General Settings > Timeouts.**

- 3 In the Sleep Mode field, enter the number of minutes you want for the printer to wait before it enters Sleep mode.

- 4 Click **Submit.**

Using the printer control panel

- 1 From the home screen, navigate to:



> **Settings > General Settings > Timeouts > Sleep Mode**

- 2 In the Sleep Mode field, select the number of minutes you want for the printer to wait before it enters Sleep mode.

- 3 Touch

Using Hibernate mode

Hibernate is an ultra-low-power operating mode. When operating in Hibernate mode, the printer is essentially off, and all other systems and devices are powered down safely.

Notes:

- Make sure to wake the printer from Hibernate mode before sending a print job. A hard reset or a long press of the Sleep button will wake the printer from Hibernate mode.
- Hibernate mode can be scheduled. For more information, see “Using Schedule Power Modes” on page 108.
- If the printer is in Hibernate mode, then the Embedded Web Server is disabled.

Using the Embedded Web Server

- 1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

- 2 Click **Settings > General Settings > Sleep Button Settings.**

3 From the “Press Sleep Button” or “Press and Hold Sleep Button” drop-down menu, select **Hibernate**.

4 Click **Submit**.

Using the printer control panel

1 From the home screen, navigate to:



> **Settings > General Settings**

2 Touch **Press Sleep Button** or **Press and Hold Sleep Button**.

3 Touch **Hibernate** > .

Notes:

- When Press Sleep Button is set to Hibernate, press the Sleep button for less than three seconds to set the printer to Hibernate mode.
- When Press and Hold Sleep Button is set to Hibernate, press and hold the Sleep button for more than three seconds to set the printer to Hibernate mode.

Setting Hibernate Timeout

Hibernate Timeout lets you set the amount of time the printer waits after a print job is processed before it goes into a reduced power state.

Using the Embedded Web Server

1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address in the TCP/IP section in the Network/Ports menu. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

2 Click **Settings > General Settings > Timeouts**.

3 From the Hibernate Timeout menu, select the number of hours, days, weeks, or months you want for the printer to wait before it goes into a reduced power state.

4 Click **Submit**.

Using the printer control panel

1 From the printer control panel, navigate to:



> **Settings > General Settings > Timeouts > Hibernate Timeout**

2 Select the amount of time the printer waits after a print job is processed before it enters Hibernate mode.

3 Touch .

Using Schedule Power Modes

Schedule Power Modes lets you schedule when the printer goes into a reduced power state or into the Ready state.

Note: This feature is available only in network printers or printers connected to print servers.

- 1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address in the TCP/IP section in the Network/Ports menu. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

- 2 Click **Settings > General Settings > Schedule Power Modes**.

- 3 From the Action menu, select the power mode.

- 4 From the Time menu, select the time.

- 5 From the Day(s) menu, select the day or days.

- 6 Click **Add**.

Adjusting the brightness of the display

To save energy, or if you are have trouble reading your display, adjust the brightness of the display.

Available settings range from 20–100. The factory default setting is 100.

Using the Embedded Web Server

- 1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address on the home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

- 2 Click **Settings > General Settings**.

- 3 In the Screen Brightness field, enter the brightness percentage you want for the display.

- 4 Click **Submit**.

Using the printer control panel

- 1 From the home screen, navigate to:



> **Settings > General Settings > Screen Brightness**

- 2 In the Screen Brightness field, enter the brightness percentage you want for the display.

- 3 Touch .

Restoring factory default settings

If you want to keep a list of the current menu settings for reference, then print a menu settings page before restoring the factory default settings. For more information, see “Printing a menu settings page” on page 103.

If you want a more comprehensive method of restoring the printer factory default settings, then perform the Wipe All Settings option. For more information, see “Erasing non-volatile memory” on page 111.

Warning—Potential Damage: Restoring factory defaults returns most printer settings to the original factory default settings. Exceptions include the display language, custom sizes and messages, and network/port menu settings. All downloads stored in the RAM are deleted. Downloads stored in the flash memory or in a printer hard disk are not affected.

From the home screen, navigate to:

 > **Settings** > **General Settings** > **Factory Defaults** > **Restore Now** > 

Securing the printer

Using the security lock feature

Attach a lock that is compatible with most laptop computers in the location shown to prevent access to the controller board.



Statement of Volatility

Your printer contains various types of memory that can store device and network settings, and user data.

Type of memory	Description
Volatile memory	Your printer uses standard random access memory (RAM) to temporarily buffer user data during simple print jobs.
Non-volatile memory	Your printer may use two forms of non-volatile memory: EEPROM and NAND (flash memory). Both types are used to store the operating system, device settings, network information and bookmark settings, and embedded solutions.
Hard disk memory	Some printers have a hard disk drive installed. The printer hard disk is designed for printer-specific functionality. This lets the printer retain buffered user data from complex print jobs, as well as form data, and font data.

Erase the content of any installed printer memory in the following circumstances:

- The printer is being decommissioned.
- The printer hard disk is being replaced.
- The printer is being moved to a different department or location.
- The printer is being serviced by someone from outside your organization.
- The printer is being removed from your premises for service.
- The printer is being sold to another organization.

Disposing of a printer hard disk

Note: Some printer models may not have a printer hard disk installed.

In high-security environments, it may be necessary to take additional steps to make sure that confidential data stored in the printer hard disk cannot be accessed when the printer—or its hard disk—is removed from your premises.

- **Degaussing**—Flushes the hard disk with a magnetic field that erases stored data
- **Crushing**—Physically compresses the hard disk to break component parts and render them unreadable
- **Milling**—Physically shreds the hard disk into small metal bits

Note: Most data can be erased electronically, but the only way to guarantee that all data are completely erased is to physically destroy each hard disk where data is stored.

Erasing volatile memory

The volatile memory (RAM) installed in your printer requires a power source to retain information. To erase the buffered data, simply turn off the printer.

Erasing non-volatile memory

Erase individual settings, device and network settings, security settings, and embedded solutions by following these steps:

- 1 Turn off the printer.
- 2 Hold down **2** and **6** on the keypad while turning the printer on. Release the buttons only when the screen with the progress bar appears.

The printer performs a power-on sequence, and then the Configuration menu appears. When the printer is fully turned on, a list of functions appears on the printer display instead of the standard home screen icons.

- 3 Touch **Wipe All Settings**.

The printer will restart several times during this process.

Note: Wipe All Settings securely removes device settings, solutions, jobs, and passwords from the printer memory.

- 4 Touch **Back > Exit Config Menu**.

The printer will perform a power-on reset, and then return to normal operating mode.

Erasing printer hard disk memory

Notes:

- Some printer models may not have a printer hard disk installed.
- Configuring Erase Temporary Data Files in the printer menus lets you remove residual confidential material left by print jobs by securely overwriting files that have been marked for deletion.

Using the printer control panel

- 1 Turn off the printer.
- 2 Hold down **2** and **6** while turning the printer on. Release the buttons only when the screen with the progress bar appears.

The printer performs a power-on sequence, and then the Configuration menu appears. When the printer is fully turned on, the touch screen displays a list of functions.

- 3 Touch **Wipe Disk**, and then touch one of the following:

- **Wipe disk (fast)**—This lets you overwrite the disk with all zeroes in a single pass.
- **Wipe disk (secure)**—This lets you overwrite the disk with random bit patterns several times, followed by a verification pass. A secure overwrite is compliant with the DoD 5220.22-M standard for securely erasing data from a hard disk. Highly confidential information should be wiped using this method.

- 4 Touch **Yes** to proceed with disk wiping.

Notes:

- A status bar will indicate the progress of the disk wiping task.
- Disk wiping can take from several minutes to more than an hour, during which the printer will be unavailable for other user tasks.

- 5 Touch **Back > Exit Config Menu**.

The printer will perform a power-on reset, and then return to normal operating mode.

Configuring printer hard disk encryption

Enable hard disk encryption to prevent loss of sensitive data in the event the printer or its hard disk is stolen.

Note: Some printer models may not have a printer hard disk installed.

Using the Embedded Web Server

- 1 Open a Web browser, and then type the printer IP address in the address field.

Notes:

- View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the Web page correctly.

- 2 Click **Settings > Security > Disk Encryption**.

Note: Disk Encryption appears in the Security Menu only when a formatted, non-defective printer hard disk is installed.

- 3 From the Disk encryption menu, select **Enable**.

Notes:

- Enabling disk encryption will erase the contents of the printer hard disk.
- Disk encryption can take from several minutes to more than an hour, during which the printer will be unavailable for other user tasks.

- 4 Click **Submit**.

Using the printer control panel

- 1 Turn off the printer.

- 2 Hold down **2** and **6** while turning the printer on. Release the buttons only when the screen with the progress bar appears.

The printer performs a power-on sequence, and then the Configuration menu appears. When the printer is fully turned on, a list of functions appears on the printer display.

- 3 Touch **Disk Encryption > Enable**.

Note: Enabling disk encryption will erase the contents of the printer hard disk.

- 4 Touch **Yes** to proceed with disk wiping.

Notes:

- Do not turn off the printer during the encryption process. Doing so may result in loss of data.
- Disk encryption can take from several minutes to more than an hour, during which the printer will be unavailable for other user tasks.
- A status bar will indicate the progress of the disk wiping task. After the disk has been encrypted, the printer will return to the Enable/Disable screen.

- 5 Touch **Back > Exit Config Menu**.

The printer will perform a power-on reset, and then return to normal operating mode.

Finding printer security information

In high-security environments, it may be necessary to take additional steps to make sure that confidential data stored in the printer cannot be accessed by unauthorized persons. For more information, visit the [**Lexmark security Web page**](#).

You can also see the *Embedded Web Server — Security: Administrator's Guide* for additional information:

- 1** Go to [**www.lexmark.com**](http://www.lexmark.com), and then navigate to **Support & Downloads** > select your printer.
- 2** Click the **Manuals** tab, and then select *Embedded Web Server — Security: Administrator's Guide*.

Paper and specialty media guide

Using specialty media

Tips on using card stock

Card stock is heavy, single-ply specialty media. Many of its variable characteristics, such as moisture content, thickness, and texture, can significantly impact print quality. Print samples on the card stock being considered for use before buying large quantities.

When printing on card stock:

- Make sure the Paper Type is Card Stock.
- Select the appropriate Paper Texture setting.
- Be aware that preprinting, perforation, and creasing may significantly affect the print quality and cause jams or other paper handling problems.
- Check with the manufacturer or vendor to ensure that the card stock can withstand temperatures up to 240°C (464°F) without releasing hazardous emissions.
- Do not use preprinted card stock manufactured with chemicals that may contaminate the printer. Preprinting introduces semi-liquid and volatile components into the printer.
- Use grain short card stock when possible.

Tips on using envelopes

Print samples on the envelopes being considered for use before buying large quantities.

- Use envelopes designed specifically for laser printers. Check with the manufacturer or vendor to ensure that the envelopes can withstand temperatures up to 230°C (446°F) without sealing, wrinkling, curling excessively, or releasing hazardous emissions.
- For best performance, use envelopes made from 90-g/m² (24-lb bond) paper or 25% cotton. All-cotton envelopes must not exceed 70-g/m² (20-lb bond) weight.
- Use only new envelopes from undamaged packages.
- To optimize performance and minimize jams, do not use envelopes that:
 - Have excessive curl or twist
 - Are stuck together or damaged in any way
 - Have windows, holes, perforations, cutouts, or embossing
 - Have metal clasps, string ties, or folding bars
 - Have an interlocking design
 - Have postage stamps attached
 - Have any exposed adhesive when the flap is in the sealed or closed position
 - Have bent corners
 - Have rough, cockle, or laid finishes
- Adjust the width guides to fit the width of the envelopes.

Note: A combination of high humidity (over 60%) and high printing temperature may wrinkle or seal envelopes.

Tips on using labels

Print samples on the labels being considered for use before buying large quantities.

Note: Use only paper label sheets. Vinyl, pharmacy, and two-sided labels are not supported.

For more information on label printing, characteristics, and design, see the *Card Stock & Label Guide* available at <http://support.lexmark.com>.

When printing on labels:

- Use labels designed specifically for laser printers. Check with the manufacturer or vendor to verify that:
 - The labels can withstand temperatures up to 240°C (464°F) without sealing, excessive curling, wrinkling, or releasing hazardous emissions.
 - Label adhesives, face sheet (printable stock), and topcoats can withstand up to 172-kPa (25-psi) pressure without delaminating, oozing around the edges, or releasing hazardous fumes.
- Do not use labels with slick backing material.
- Use full label sheets. Partial sheets may cause labels to peel off during printing, resulting in a jam. Partial sheets also contaminate the printer and the cartridge with adhesive, and could void the printer and toner cartridge warranties.
- Do not use labels with exposed adhesive.
- Do not print within 1 mm (0.04 inch) of the edge of the label, of the perforations, or between die-cuts of the label.
- Make sure the adhesive backing does not reach to the edge of the sheet. Zone coating of the adhesive should be at least 1 mm (0.04 inch) away from edges. Adhesive material contaminates the printer and could void the warranty.
- If zone coating of the adhesive is not possible, then remove a 2-mm (0.08-inch) strip on the leading and driver edge, and then use a non-oozing adhesive.
- Portrait orientation is recommended, especially when printing bar codes.

Tips on using letterhead

- Use letterhead designed specifically for laser printers.
- Print samples on the letterhead being considered for use before buying large quantities.
- Before loading letterhead, flex, fan, and straighten the stack to prevent sheets from sticking together.
- Page orientation is important when printing on letterhead. For information on how to load letterhead, see:
 - “Loading trays” on page 42
 - “Loading the multipurpose feeder” on page 46

Tips on using transparencies

- Print a test page on the transparencies being considered for use before buying large quantities.
- Feed transparencies from the standard tray, or the multipurpose feeder.
- Use transparencies designed specifically for laser printers. Transparencies must be able to withstand temperatures up to 185°C (365°F) without melting, discoloring, offsetting, or releasing hazardous emissions.

Note: If the transparency weight is set to Heavy and the transparency texture is set to Rough in the Paper menu, then transparencies can be printed at a temperature up to 195°C (383°F).

- Avoid getting fingerprints on the transparencies to prevent print quality problems.
- Before loading transparencies, flex, fan, and straighten the stack to prevent sheets from sticking together.

Paper guidelines

Selecting the correct paper or specialty media reduces printing problems. For the best print quality, try a sample of the paper or specialty media before buying large quantities.

Paper characteristics

The following paper characteristics affect print quality and reliability. Consider these characteristics when evaluating new paper stock.

Weight

The printer trays can automatically feed paper weights up to 120-g/m² (32-lb) bond grain long paper. The multipurpose feeder can automatically feed paper weights up to 163-g/m² (43-lb) bond grain long paper. Paper lighter than 60 g/m² (16 lb) might not be stiff enough to feed properly, causing jams. For best performance, use 75-g/m² (20-lb) bond grain long paper. For paper smaller than 182 x 257 mm (7.2 x 10.1 inches), we recommended to use 90 g/m² (24 lb) or heavier paper.

Note: Two-sided printing is supported only for 60–90-g/m² (16–24-lb) bond paper.

Curl

Curl is the tendency for paper to curl at its edges. Excessive curl can cause paper feeding problems. Curl can occur after the paper passes through the printer, where it is exposed to high temperatures. Storing paper unwrapped in hot, humid, cold, or dry conditions, even in the trays, can contribute to paper curling prior to printing and can cause feeding problems.

Smoothness

Paper smoothness directly affects print quality. If paper is too rough, then toner cannot fuse to it properly. If paper is too smooth, then it can cause paper feeding or print quality issues. Always use paper between 100 and 300 Sheffield points; however, smoothness between 150 and 250 Sheffield points produces the best print quality.

Moisture content

The amount of moisture in paper affects both print quality and the ability of the printer to feed the paper correctly. Leave paper in its original wrapper until it is time to use it. This limits the exposure of paper to moisture changes that can degrade its performance.

Store paper in its original wrapper in the same environment as the printer for 24 to 48 hours before printing. Extend the time to several days if the storage or transportation environment is very different from the printer environment. Thick paper may also require a longer conditioning period.

Grain direction

Grain refers to the alignment of the paper fibers in a sheet of paper. Grain is either *grain long*, running the length of the paper, or *grain short*, running the width of the paper.

For 60–90-g/m² (16–24-lb) bond paper, grain long paper is recommended.

Fiber content

Most high-quality xerographic paper is made from 100% chemically treated pulped wood. This content provides the paper with a high degree of stability resulting in fewer paper feeding problems and better print quality. Paper containing fibers such as cotton can negatively affect paper handling.

Unacceptable paper

The following paper types are not recommended for use with the printer:

- Chemically-treated papers used to make copies without carbon paper, also known as carbonless papers, carbonless copy paper (CCP), or no carbon required (NCR) paper
- Preprinted papers with chemicals that may contaminate the printer
- Preprinted papers that can be affected by the temperature in the printer fuser
- Preprinted papers that require a registration (the precise print location on the page) greater or lesser than ± 2.5 mm (± 0.10 inch), such as optical character recognition (OCR) forms

In some cases, registration can be adjusted with a software application to successfully print on these forms:

- Coated papers (erasable bond), synthetic papers, thermal papers
- Rough-edged, rough or heavily textured surface papers, or curled papers
- Recycled papers that fail EN12281:2002 (European)
- Paper weighing less than 60 g/m^2 (16 lb)
- Multiple-part forms or documents

Selecting paper

Using the appropriate paper prevents jams and helps ensure trouble-free printing.

To help avoid paper jams and poor print quality:

- *Always* use new, undamaged paper.
- Before loading paper, know the recommended printable side of the paper. This information is usually indicated on the paper package.
- *Do not* use paper that has been cut or trimmed by hand.
- *Do not* mix paper sizes, types, or weights in the same tray; mixing results in jams.
- *Do not* use coated papers unless they are specifically designed for electrophotographic printing.

Selecting preprinted forms and letterhead

Use these guidelines when selecting preprinted forms and letterhead:

- Use grain long for 60 to 90 g/m^2 (16 to 24 lb) weight paper.
- Use only forms and letterhead printed using an offset lithographic or engraved printing process.
- Avoid papers with rough or heavily textured surfaces.

Use papers printed with heat-resistant inks designed for use in xerographic copiers. The ink must be able to withstand temperatures up to 230°C (446°F) without melting or releasing hazardous emissions. Use inks that are not affected by the resin in toner. Inks that are oxidation-set or oil-based generally meet these requirements; latex inks might not. When in doubt, contact the paper supplier.

Preprinted papers such as letterhead must be able to withstand temperatures up to 230°C (446°F) without melting or releasing hazardous emissions.

Using recycled paper and other office papers

As an environmentally conscious company, Lexmark supports the use of recycled office paper produced specifically for use in laser (electrophotographic) printers. In 1998, Lexmark presented to the US government a study demonstrating that recycled paper produced by major mills in the US fed as well as non-recycled paper. However, no blanket statement can be made that *all* recycled paper will feed well.

Lexmark consistently tests its printers with recycled paper (20–100% post-consumer waste) and a variety of test paper from around the world, using chamber tests for different temperature and humidity conditions. Lexmark has found no reason to discourage the use of today's recycled office papers, but generally the following property guidelines apply to recycled paper.

- Low moisture content (4–5%)
- Suitable smoothness (100–200 Sheffield units, or 140–350 Bendtsen units, European)

Note: Some much smoother papers (such as premium 24 lb laser papers, 50–90 Sheffield units) and much rougher papers (such as premium cotton papers, 200–300 Sheffield units) have been engineered to work very well in laser printers, despite surface texture. Before using these types of paper, consult your paper supplier.

- Suitable sheet-to-sheet coefficient of friction (0.4–0.6)
- Sufficient bending resistance in the direction of feed

Recycled paper, paper of lower weight (<60 g/m² [16 lb bond]) and/or lower caliper (<3.8 mils [0.1 mm]), and paper that is cut grain-short for portrait (or short-edge) fed printers may have lower bending resistance than is required for reliable paper feeding. Before using these types of paper for laser (electrophotographic) printing, consult your paper supplier. Remember that these are general guidelines only and that paper meeting these guidelines may still cause paper feeding problems in any laser printer (for example, if the paper curls excessively under normal printing conditions).

Storing paper

Use these paper storage guidelines to help avoid jams and uneven print quality:

- For best results, store paper where the temperature is 21°C (70°F) and the relative humidity is 40 percent. Most label manufacturers recommend printing in a temperature range of 18–24°C (65–75°F) with relative humidity between 40 and 60 percent.
- Store paper in cartons, on a pallet or shelf, rather than on the floor.
- Store individual packages on a flat surface.
- Do not store anything on top of individual paper packages.
- Take paper out of the carton or wrapper only when you are ready to load it in the printer. The carton and wrapper help keep the paper clean, dry, and flat.

Supported paper sizes, types, and weights

Supported paper sizes

Note: For an unlisted paper size, select the closest *larger* listed size. For information on card stock and labels, see the *Card Stock & Label Guide*.

Paper size	Standard tray	Optional 250- or 550-sheet tray	Multipurpose feeder	Duplex mode
A4 210 x 297 mm (8.3 x 11.7 in.)	✓	✓	✓	✓
A5 148 x 210 mm (5.8 x 8.3 in.)	✓	✓	✓	✗
A6 105 x 148 mm (4.1 x 5.8 in.)	✓	✗	✓	✗
JIS B5 182 x 257 mm (7.2 x 10.1 in.)	✓	✓	✓	✗
Letter 216 x 279 mm (8.5 x 11 in.)	✓	✓	✓	✓
Legal 216 x 356 mm (8.5 x 14 in.)	✓	✓	✓	✓
Executive 184 x 267 mm (7.3 x 10.5 in.)	✓	✓	✓	✗
Oficio (Mexico)¹ 216 x 340 mm (8.5 x 13.4 in.)	✓	✓	✓	✓
Folio 216 x 330 mm (8.5 x 13 in.)	✓	✓	✓	✓
Statement 140 x 216 mm (5.5 x 8.5 in.)	✓	✓	✓	✗
Universal² 76.2 x 127 mm (3 x 5 in.) up to 216 x 356 mm (8.5 x 14 in.)	✓	✓	✓	✓
7 3/4 Envelope (Monarch) 98 x 191 mm (3.9 x 7.5 in.)	✗	✗	✓	✗
9 Envelope 98 x 225 mm (3.9 x 8.9 in.)	✗	✗	✓	✗

¹ This size setting formats the page for 216 x 356 mm (8.5 x 14 in.) unless the size is specified by the software application.

² Universal is supported only in the standard tray if the paper size is at least 105 x 148 mm (4.1 x 5.8 in.). Universal is supported only in the optional 250- or 550-sheet tray if the paper size is at least 148 x 210 mm (5.8 x 8.3 in.). Universal is only supported in duplex mode if the width is at least 210 mm (8.3 in.) and length is at least 279 mm (11 in.). The smallest supported Universal size is only supported in the multipurpose feeder.

Paper size	Standard tray	Optional 250- or 550-sheet tray	Multipurpose feeder	Duplex mode
10 Envelope 105 x 241 mm (4.1 x 9.5 in.)	x	x	✓	x
DL Envelope 110 x 220 mm (4.3 x 8.7 in.)	x	x	✓	x
C5 Envelope 162 x 229 mm (6.4 x 9 in.)	x	x	✓	x
B5 Envelope 176 x 250 mm (6.9 x 9.8 in.)	x	x	✓	x
Other Envelope 229 x 356 mm (9 x 14 in.)	x	x	✓	x

¹ This size setting formats the page for 216 x 356 mm (8.5 x 14 in.) unless the size is specified by the software application.

² Universal is supported only in the standard tray if the paper size is at least 105 x 148 mm (4.1 x 5.8 in.). Universal is supported only in the optional 250- or 550-sheet tray if the paper size is at least 148 x 210 mm (5.8 x 8.3 in.). Universal is only supported in duplex mode if the width is at least 210 mm (8.3 in.) and length is at least 279 mm (11 in.). The smallest supported Universal size is only supported in the multipurpose feeder.

Supported paper types and weights

The standard tray supports 60–90-g/m² (16–24-lb) paper weights. The optional tray supports 60–120-g/m² (16–32-lb) paper weights. The multipurpose feeder supports 60–163-g/m² (16–43-lb) paper weights.

Paper type	250- or 550-sheet tray	Multipurpose feeder	Duplex mode
Plain paper	✓	✓	✓
Card stock	x	✓	x
Transparencies	✓	✓	x
Recycled	✓	✓	✓
Glossy paper	x	x	x
Paper labels ¹	✓	✓	x
Vinyl labels	x	x	x
Bond ²	✓	✓	✓
Envelope	x	✓	x
Rough envelope	x	✓	x
Letterhead	✓	✓	✓

Paper type	250- or 550-sheet tray	Multipurpose feeder	Duplex mode
Preprinted	✓	✓	✓
Colored Paper	✓	✓	✓
Light Paper	✓	✓	✓
Heavy Paper²	✓	✓	✓
Rough/Cotton	✓	✓	x

¹ One-sided paper labels designed for laser printers are supported for occasional use. It is recommended to print 20 or fewer pages of paper labels per month. Vinyl, pharmacy, and two-sided labels are not supported.

² Bond and Heavy Paper are supported in duplex mode up to 90-g/m² (24-lb) paper weight.

Understanding the printer menus

Menus list

Paper Menu	Reports	Network/Ports
Default Source	Menu Settings Page	Active NIC
Paper Size/Type	Device Statistics	Standard Network ³
Configure MP	Network Setup Page ²	Reports
Substitute Size	Profiles List	Network Card
Paper Texture	Print Fonts	TCP/IP
Paper Weight	Print Directory	IPv6
Paper Loading	Print Demo	Wireless
Custom Types	Asset Report	AppleTalk
Custom Names ¹		Standard USB
Universal Setup		Parallel ⁴
		SMTP Setup
Security	Settings	Help
Miscellaneous Security Settings ⁴	General Settings	Print All Guides
Confidential Print	Flash Drive Menu ⁴	Print Quality
Erase Temporary Data Files ⁴	Print Settings	Media Guide
Security Audit Log		Print Defects Guide
Set Date and Time		Menu Map
		Information Guide
		Connection Guide
		Moving Guide
		Supplies Guide

¹ This menu appears only in touch-screen printer models.

² Depending on the printer setup, this menu item appears as Network Setup Page or Network [x] Setup Page.

³ Depending on the printer setup, this menu item appears as Standard Network or Network [x].

⁴ This feature is available only in select printer models.

Paper menu

Default Source menu

Use	To
Default Source <ul style="list-style-type: none"> Tray [x] Multipurpose Feeder Manual Paper Manual Envelope 	<p>Set a default paper source for all print jobs.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Tray 1 (standard tray) is the factory default setting. • From the Paper menu, set Configure MP to "Cassette" for Multipurpose Feeder to appear as a menu setting. • If two trays contain paper of the same size and type, and the trays have the same settings, then the trays are automatically linked. When one tray is empty, the print job continues using the linked tray.

Paper Size/Type menu

Use	To
Tray [x] Size <ul style="list-style-type: none"> A4 A5 A6 JIS-B5 Letter Legal Executive Oficio (Mexico) Folio Statement Universal 	<p>Specify the paper size loaded in each tray.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Letter is the U.S. factory default setting. A4 is the international factory default setting. • If two trays contain paper of the same size and type, and the trays have the same settings, then the trays are automatically linked. When one tray is empty, the print job continues using the linked tray. • The A6 paper size is supported only in Tray 1 and the multipurpose feeder.
Tray [x] Type <ul style="list-style-type: none"> Plain Paper Transparency Recycled Labels Bond Letterhead Preprinted Colored Paper Light Paper Heavy Paper Rough/Cotton Custom Type [x] 	<p>Specify the type of paper loaded in each tray.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Plain Paper is the factory default setting for Tray 1. Custom Type [x] is the factory default setting for all other trays. • If available, a user-defined name will appear instead of Custom Type [x]. • Use this menu to configure automatic tray linking.

Note: Only installed trays and feeders are listed in this menu.

Use	To
Multipurpose Feeder Size A4 A5 A6 JIS B5 Letter Legal Executive Oficio (Mexico) Folio Statement Universal 7 3/4 Envelope 9 Envelope 10 Envelope DL Envelope C5 Envelope B5 Envelope Other Envelope	<p>Specify the paper size loaded in the multipurpose feeder.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Letter is the U.S. factory default setting. A4 is the international factory default setting. • From the Paper menu, set Configure MP to “Cassette” for Multipurpose Feeder Size to appear as a menu. • The multipurpose feeder does not automatically detect paper size. Make sure to set the paper size value.
Multipurpose Feeder Type Plain Paper Card Stock Transparency Recycled Labels Bond Envelope Rough Envelope Letterhead Preprinted Colored Paper Light Paper Heavy Paper Rough/Cotton Custom Type [x]	<p>Specify the type of paper loaded in the multipurpose feeder.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Plain Paper is the factory default setting. • From the Paper menu, set Configure MP to “Cassette” for Multipurpose Feeder Type to appear as a menu.

Note: Only installed trays and feeders are listed in this menu.

Use	To
Manual Paper Size A4 A5 A6 JIS B5 Letter Legal Executive Oficio (Mexico) Folio Statement Universal	Specify the paper size being manually loaded. Note: Letter is the U.S. factory default setting. A4 is the international factory default setting.
Manual Paper Type Plain Paper Card Stock Transparency Recycled Labels Bond Letterhead Preprinted Colored Paper Light Paper Heavy Paper Rough/Cotton Custom Type [x]	Specify the paper type being manually loaded. Notes: <ul style="list-style-type: none"> • Plain Paper is the factory default setting. • From the Paper menu, set Configure MP to "Manual" for Manual Paper Type to appear as a menu.
Manual Envelope Size 7 3/4 Envelope 9 Envelope 10 Envelope DL Envelope C5 Envelope B5 Envelope Other Envelope	Specify the envelope size being manually loaded. Note: 10 Envelope is the U.S. factory default setting. DL Envelope is the international factory default setting.
Manual Envelope Type Envelope Rough Envelope Custom Type [x]	Specify the envelope type being manually loaded. Note: Envelope is the factory default setting.
Note: Only installed trays and feeders are listed in this menu.	

Configure MP menu

Use	To
Configure MP <ul style="list-style-type: none"> Cassette Manual First 	<p>Determine when the printer selects paper from the multipurpose feeder.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Cassette is the factory default setting. Cassette configures the multipurpose feeder as the automatic paper source. • Manual sets the multipurpose feeder only for manual-feed print jobs. • First configures the multipurpose feeder as the primary paper source.

Substitute Size menu

Use	To
Substitute Size <ul style="list-style-type: none"> Off Statement/A5 Letter/A4 All Listed 	<p>Substitute a specified paper size if the requested paper size is not available.</p> <p>Notes:</p> <ul style="list-style-type: none"> • All Listed is the factory default setting. All available substitutions are allowed. • Off indicates that no size substitutions are allowed. • Setting a size substitution lets the print job continue without Change Paper appearing.

Paper Texture menu

Use	To
Plain Texture <ul style="list-style-type: none"> Smooth Normal Rough 	<p>Specify the relative texture of the plain paper loaded.</p> <p>Note: Normal is the factory default setting.</p>
Card Stock Texture <ul style="list-style-type: none"> Smooth Normal Rough 	<p>Specify the relative texture of the card stock loaded.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Normal is the factory default setting. • The options appear only if card stock is supported.
Transparency Texture <ul style="list-style-type: none"> Smooth Normal Rough 	<p>Specify the relative texture of the transparencies loaded.</p> <p>Note: Normal is the factory default setting.</p>
Recycled Texture <ul style="list-style-type: none"> Smooth Normal Rough 	<p>Specify the relative texture of the recycled paper loaded.</p> <p>Note: Normal is the factory default setting.</p>

Use	To
Labels Texture Smooth Normal Rough	Specify the relative texture of the labels loaded. Note: Normal is the factory default setting.
Bond Texture Smooth Normal Rough	Specify the relative texture of the bond paper loaded. Note: Rough is the factory default setting.
Envelope Texture Smooth Normal Rough	Specify the relative texture of the envelopes loaded. Note: Normal is the factory default setting.
Rough Envelope Texture Rough	Specify the relative texture of the rough envelopes loaded.
Letterhead Texture Smooth Normal Rough	Specify the relative texture of the letterhead loaded. Note: Normal is the factory default setting.
Preprinted Texture Smooth Normal Rough	Specify the relative texture of the preprinted paper loaded. Note: Normal is the factory default setting.
Colored Texture Smooth Normal Rough	Specify the relative texture of the colored paper loaded. Note: Normal is the factory default setting.
Light Texture Smooth Normal Rough	Specify the relative texture of the paper loaded. Note: Normal is the factory default setting.
Heavy Texture Smooth Normal Rough	Specify the relative texture of the paper loaded. Note: Normal is the factory default setting.
Rough/Cotton Texture Rough	Specify the relative texture of the cotton paper loaded.
Custom [x] Texture Smooth Normal Rough	Specify the relative texture of the custom paper loaded. Notes: <ul style="list-style-type: none"> • Normal is the factory default setting. • The options appear only if the custom type is supported.

Paper Weight menu

Use	To
Plain Weight Light Normal Heavy	Specify the relative weight of the plain paper loaded. Note: Normal is the factory default setting.
Card Stock Weight Light Normal Heavy	Specify the relative weight of the card stock loaded. Note: Normal is the factory default setting.
Transparency Weight Light Normal Heavy	Specify the relative weight of the transparencies loaded. Note: Normal is the factory default setting.
Recycled Weight Light Normal Heavy	Specify the relative weight of the recycled paper loaded. Note: Normal is the factory default setting.
Labels Weight Light Normal Heavy	Specify the relative weight of the labels loaded. Note: Normal is the factory default setting.
Bond Weight Light Normal Heavy	Specify the relative weight of the bond paper loaded. Note: Normal is the factory default setting.
Envelope Weight Light Normal Heavy	Specify the relative weight of the envelope loaded. Note: Normal is the factory default setting.
Rough Envelope Weight Light Normal Heavy	Specify the relative weight of the rough envelope loaded. Note: Normal is the factory default setting.
Letterhead Weight Light Normal Heavy	Specify the relative weight of the letterhead loaded. Note: Normal is the factory default setting.
Preprinted Weight Light Normal Heavy	Specify the relative weight of the preprinted paper loaded. Note: Normal is the factory default setting.

Use	To
Colored Weight Light Normal Heavy	Specify the relative weight of the colored paper loaded. Note: Normal is the factory default setting.
Light Weight Light	Specify that the weight of the paper loaded is light.
Heavy Weight Heavy	Specify that the weight of the paper loaded is heavy.
Cotton/Rough Weight Light Normal Heavy	Specify the relative weight of the cotton or rough paper loaded. Note: Heavy is the factory default setting.
Custom [x] Weight Light Normal Heavy	Specify the relative weight of the custom paper loaded. Notes: <ul style="list-style-type: none"> • Normal is the factory default setting. • The options appear only when the custom type is supported.

Paper Loading menu

Use	To
Recycled Loading Duplex Off	Determine and set two-sided printing for all print jobs that specify Recycled as the paper type.
Bond Loading Duplex Off	Determine and set two-sided printing for all print jobs that specify Bond as the paper type.
Letterhead Loading Duplex Off	Determine and set two-sided printing for all print jobs that specify Letterhead as the paper type.
Preprinted Loading Duplex Off	Determine and set two-sided printing for all print jobs that specify Preprinted as the paper type.
Colored Loading Duplex Off	Determine and set two-sided printing for all print jobs that specify Colored as the paper type.
Notes:	
<ul style="list-style-type: none"> • Duplex sets two-sided printing as the default for all print jobs unless one-sided printing is set from Printing Preferences or Print dialog. • If Duplex is selected, then all print jobs are sent through the duplex unit, including one-sided jobs. • Off is the factory default setting for all the menus. 	

Use	To
Light Loading Duplex Off	Determine and set two-sided printing for all print jobs that specify Light as the paper type.
Heavy Loading Duplex Off	Determine and set two-sided printing for all print jobs that specify Heavy as the paper type.
Custom [x] Loading Duplex Off	Determine and set two-sided printing for all print jobs that specify Custom [x] as the paper type. Note: Custom [x] Loading is available only if the custom type is supported.

Notes:

- Duplex sets two-sided printing as the default for all print jobs unless one-sided printing is set from Printing Preferences or Print dialog.
- If Duplex is selected, then all print jobs are sent through the duplex unit, including one-sided jobs.
- Off is the factory default setting for all the menus.

Custom Types menu

Use	To
Custom Type [x] Paper Card Stock Transparency Rough/Cotton Labels Envelope	Associate a paper or specialty media type with a factory default Custom Type [x] name or a user-defined custom name created in the Embedded Web Server or MarkVision™ Professional. The user-defined name appears instead of Custom Type [x]. Notes: <ul style="list-style-type: none"> • Paper is the factory default setting for Custom Type [x]. • The custom media type must be supported in the selected tray or feeder in order to print from that source.
Recycled Paper Card Stock Transparency Rough/Cotton Labels Envelope Cotton	Specify a paper type when the Recycled setting is selected in other menus. Notes: <ul style="list-style-type: none"> • Paper is the factory default setting. • The Recycled paper type must be supported in the selected tray or feeder in order to print from that source.

Custom Names menu

Use	To
Custom Name [x]	Specify a custom name for a paper type. This name replaces the Custom Type [x] name in the printer menus. Note: This menu item appears only in touch-screen printer models.

Universal Setup menu

Use	To
Units of Measure Inches Millimeters	Identify the units of measure. Notes: <ul style="list-style-type: none"> • Inches is the US factory default setting. • Millimeters is the international factory default setting.
Portrait Width 3–8.5 inches 76–216 mm	Set the portrait width. Notes: <ul style="list-style-type: none"> • If the width exceeds the maximum, then the printer uses the maximum width allowed. • 8.5 inches is the US factory default setting. You can increase the width in 0.01-inch increments. • 216 mm is the international factory default setting. You can increase the width in 1-mm increments.
Portrait Height 3–14.17 inches 76–360 mm	Set the portrait height. Notes: <ul style="list-style-type: none"> • If the height exceeds the maximum, then the printer uses the maximum height allowed. • 14 inches is the US factory default setting. You can increase the height in 0.01-inch increments. • 356 mm is the international factory default setting. You can increase the height in 1-mm increments.
Feed Direction Short Edge Long Edge	Specify the feed direction if the paper can be loaded in either direction. Notes: <ul style="list-style-type: none"> • Short Edge is the factory default setting. • Long Edge appears only when the longest edge is shorter than the maximum width supported in the tray.

Reports menu

Reports menu

Use	To
Menu Settings Page	Print a report containing information about the paper loaded in trays, installed memory, total page count, alarms, timeouts, printer control panel language, TCP/IP address, status of supplies, status of the network connection, and other information.
Device Statistics	Print a report containing printer statistics such as supply information and details about printed pages.

Use	To
Network Setup Page	Print a report containing information about the network printer settings, such as the TCP/IP address information. Note: This menu item appears only in network printers or in printers connected to print servers.
Profiles List	Print a list of profiles stored in the printer. Note: This menu item appears only when LDSS is enabled.
Print Fonts PCL Fonts PostScript Fonts	Print a report of all the fonts available for the printer language currently set in the printer. Note: A separate list is available for PCL and PostScript emulations.
Print Directory	Print a list of all the resources stored in an optional flash memory card or printer hard disk. Notes: <ul style="list-style-type: none"> • Job Buffer Size must be set to 100%. • Make sure the optional flash memory or printer hard disk is installed correctly and working properly. • This menu item appears only when a flash or disk option is installed.
Asset Report	Print a report containing printer asset information, such as serial number and model name.

Network/Ports menu

Active NIC menu

Use	To
Active NIC Auto [list of available network cards]	Notes: <ul style="list-style-type: none"> • Auto is the factory default setting. • This menu item appears only when an optional network card is installed.

Standard Network or Network [x] menus

Note: Only active ports appear in this menu. All inactive ports are omitted.

Use	To
PCL SmartSwitch On Off	Set the printer to automatically switch to PCL emulation when a print job requires it, regardless of the default printer language. Notes: <ul style="list-style-type: none"> • On is the factory default setting. • When Off is used, the printer does not examine incoming data. The printer uses PostScript emulation if PS SmartSwitch is set to On. It uses the default printer language specified in the Setup menu if PS SmartSwitch is set to Off.

Use	To
PS SmartSwitch On Off	<p>Set the printer to automatically switch to PS emulation when a print job requires it, regardless of the default printer language.</p> <p>Notes:</p> <ul style="list-style-type: none"> • On is the factory default setting. • When Off is used, the printer does not examine incoming data. The printer uses PCL emulation if PCL SmartSwitch is set to On. It uses the default printer language specified in the Setup menu if PCL SmartSwitch is set to Off.
NPA Mode Off Auto	<p>Set the printer to perform the special processing required for bidirectional communication following the conventions defined by the NPA protocol.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Auto is the factory default setting. • Changing this setting from the printer control panel and then exiting the menus causes the printer to restart. The menu selection is then updated.
Network Buffer Auto 3KB to [maximum size allowed]	<p>Set the size of the network input buffer.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Auto is the factory default setting. • The value can be changed in 1-KB increments. • The maximum size allowed depends on the amount of memory in the printer, the size of the other link buffers, and whether Resource Save is set to On or Off. • To increase the maximum size range for the Network Buffer, disable or reduce the size of the parallel, serial, and USB buffers. • Changing this setting from the printer control panel and then exiting the menus causes the printer to restart. The menu selection is then updated.
Job Buffering Off On Auto	<p>Temporarily store print jobs in the printer hard disk before printing. This menu only appears when a formatted disk is installed.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Off is the factory default setting. • On buffers print jobs on the printer hard disk. • Auto buffers print jobs only when the printer is busy processing data from another input port. • Changing this setting from the printer control panel and then exiting the menus causes the printer to restart. The menu selection is then updated.
Mac Binary PS On Off Auto	<p>Set the printer to process Macintosh binary PostScript print jobs.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Auto is the factory default setting. • Off filters print jobs using the standard protocol. • On processes raw binary PostScript print jobs.

Use	To
Standard Network Setup OR Network [x] Setup Reports Network Card TCP/IP IPv6 Wireless AppleTalk	Display and set the printer network settings. Note: The Wireless menu appears only when the printer is connected to a wireless network.

Reports menu

To access the menu, navigate to any of the following:

- **Network/Ports menu > Networks/Ports > Standard Network > Standard Network Setup > Reports**
- **Network/Ports menu > Networks/Ports > Network [x] > Network [x] Setup > Reports**

Use	To
Print Setup Page	Print a report containing information about the network printer settings, such as the TCP/IP address.

Network Card menu

To access the menu, navigate to either of the following:

- **Network/Ports > Standard Network > Standard Network Setup > Network Card**
- **Network/Ports > Network [x] > Network [x] Setup > Network Card**

Use	To
View Card Status Connected Disconnected	View the connection status of the network card.
View Card Speed	View the speed of an active network card.
Network Address UAA LAA	View the network addresses.
Job Timeout 0–255 seconds	Set the amount of time it takes for a network print job to be canceled. Notes: <ul style="list-style-type: none"> • 90 seconds is the factory default setting. • A setting value of 0 disables the timeout. • If a value of 1–9 is selected, then the setting is saved as 10.

TCP/IP menu

To access the menu, navigate to any of the following:

- **Network/Ports > Standard Network > Standard Network Setup > TCP/IP**
- **Network/Ports > Network [x] > Network [x] Setup > TCP/IP**

Note: This menu is available only in network printers or printers connected to print servers.

Use	To
Set Hostname	Set the host name. Notes: <ul style="list-style-type: none"> • This setting can be changed only from the Embedded Web Server. • The host name is limited to 15 characters, and accepts US-ASCII, alphanumeric characters and hyphen only.
IP Address	View or change the current TCP/IP address. Note: Manually setting the IP address sets the Enable DHCP and Enable Auto IP settings to Off. It also sets Enable BOOTP and Enable RARP to Off on systems that support BOOTP and RARP.
Netmask	View or change the current TCP/IP netmask.
Gateway	View or change the current TCP/IP gateway.
Enable DHCP On Off	Specify the DHCP address and parameter assignment. Note: On is the factory default setting.
Enable RARP On Off	Specify the RARP address assignment setting. Notes: <ul style="list-style-type: none"> • On is the factory default setting. • This menu item appears only in touch-screen printer models.
Enable BOOTP On Off	Specify the BOOTP address assignment setting. Notes: <ul style="list-style-type: none"> • On is the factory default setting. • This menu item appears only in touch-screen printer models.
Enable AutoIP Yes No	Specify the Zero Configuration Networking setting. Note: Yes is the factory default setting.
Enable FTP/TFTP Yes No	Enable the built-in FTP server, which lets you send files to the printer using File Transfer Protocol. Note: Yes is the factory default setting.
Enable HTTP Server Yes No	Enable the built-in Web server (Embedded Web Server). When enabled, the printer can be monitored and managed remotely using a Web browser. Note: Yes is the factory default setting.
WINS Server Address	View or change the current WINS server address.

Use	To
Enable DDNS Yes No	View or change the current DDNS setting. Note: Yes is the factory default setting.
Enable mDNS Yes No	View or change the current mDNS setting. Note: Yes is the factory default setting.
DNS Server Address	View or change the current DNS server address.
Backup DNS Server Address	View or change the backup DNS server addresses.
Backup DNS Server Address 2	
Backup DNS Server Address 3	
Enable HTTPS Yes No	View or change the current HTTPS setting. Note: Yes is the factory default setting.

IPv6 menu

To access the menu, navigate to any of the following:

- **Network/Ports > Standard Network > Standard Network Setup > IPv6**
- **Network/Ports > Network [x] > Network [x] Setup > IPv6**

Note: This menu is available only in network printers or printers connected to print servers.

Use	To
Enable IPv6 On Off	Enable Internet Protocol Version Six (IPv6) in the printer. IPv6 uses bigger numbers to create IP addresses. Note: On is the factory default setting.
Auto Configuration On Off	Specify whether or not the network adapter accepts the automatic IPv6 address configuration entries provided by a router. Note: On is the factory default setting.
Set Hostname*	Set the host name. Note: The host name is limited to 15 characters, and accepts US-ASCII, alphanumeric characters and hyphen only.
View Address*	View the current IPv6 addresses.
View Router Address*	View the current router address.
Enable DHCPv6 On Off	Enable DHCPv6 in the printer. Note: On is the factory default setting.

* These settings can be changed only from the Embedded Web Server.

Wireless menu

Note: This menu is available only in printer models connected to a wireless network.

To access the menu, navigate to any of the following:

- **Network/Ports > Standard Network > Standard Network Setup > Wireless**
- **Network/Ports > Network [x] > Network [x] Setup > Wireless**

Use	To
Wi-Fi Protected Setup (WPS) Start Push Button Method Start PIN Method	Establish a wireless network and enable network security. Notes: <ul style="list-style-type: none"> • Start Push Button Method connects the printer to a wireless network by pressing buttons on both the printer and the access point (wireless router) within a given period of time. • Start PIN Method connects the printer to a wireless network by using a PIN on the printer and entering it into the wireless settings of the access point.
Enable/Disable WPS Auto-detection Enable Disable	Automatically detect the connection method that an access point with WPS uses—Start Push Button Method or Start PIN Method. Note: Disable is the factory default setting.
Network Mode Infrastructure Ad hoc	Specify the network mode. Notes: <ul style="list-style-type: none"> • Ad hoc is the factory default setting. This configures wireless connection directly between the printer and a computer. • Infrastructure lets the printer access a network using an access point.
Compatibility 802.11b/g 802.11b/g/n	Specify the wireless standard for the wireless network. Note: The 802.11b/g/n is the factory default setting.
Choose Network	Select an available network for the printer to use.
View Signal Quality	View the quality of the wireless connection.
View Security Mode	View the encryption method for the wireless network.

AppleTalk menu

Note: This menu is available only in printer models connected to a wired network or when an optional network card is installed.

To access the menu, navigate to any of the following:

- **Network/Ports > Standard Network > Standard Network Setup > AppleTalk**
- **Network/Ports > Network Setup [x] > AppleTalk**

Use	To
Activate Yes No	Enable or disable AppleTalk support. Note: Yes is the factory default setting.
View Name	Show the assigned AppleTalk name. Note: The name can be changed only from the Embedded Web Server.
View Address	Show the assigned AppleTalk address. Note: The address can be changed only from the Embedded Web Server.
Set Zone [list of zones available on the network]	Provide a list of AppleTalk zones available on the network. Note: The factory default setting is the default zone for the network. If no default zone exists, then the zone marked with an asterisk (*) is the default setting.

Standard USB menu

Use	To
PCL SmartSwitch On Off	Set the printer to automatically switch to PCL emulation when a print job received through a USB port requires it, regardless of the default printer language. Notes: <ul style="list-style-type: none"> • On is the factory default setting. • When set to Off, the printer does not examine incoming data. The printer uses PostScript emulation if the PS SmartSwitch is set to On. It uses the default printer language specified in the Setup menu if the PS SmartSwitch is set to Off.
PS SmartSwitch On Off	Set the printer to automatically switch to PS emulation when a print job received through a USB port requires it, regardless of the default printer language. Notes: <ul style="list-style-type: none"> • On is the factory default setting. • When set to Off, the printer does not examine incoming data. The printer uses PCL emulation if the PCL SmartSwitch is set to On. It uses the default printer language specified in the Setup menu if the PCL SmartSwitch is set to Off.
NPA Mode On Off Auto	Set the printer to perform the special processing required for bidirectional communication following the conventions defined by the NPA protocol. Notes: <ul style="list-style-type: none"> • Auto is the factory default setting. Auto sets the printer to examine data, determine the format, and then process it appropriately. • The printer automatically restarts when changing the setting from the printer control panel. The menu selection is then updated.

Use	To
USB Buffer Disabled Auto 3K to [maximum size allowed]	Set the size of the USB input buffer. Notes: <ul style="list-style-type: none"> • Auto is the factory default setting. • Disabled turns off job buffering. Any jobs already buffered on the printer hard disk are printed before normal processing resumes. • The USB buffer size value can be changed in 1-K increments. • The maximum size allowed depends on the amount of memory in the printer, the size of the other link buffers, and whether Resource Save is set to On or Off. • To increase the maximum size range for the USB Buffer, disable or reduce the size of the parallel, serial, and network buffers. • The printer automatically restarts when the setting is changed from the printer control panel. The menu selection is then updated.
Job Buffering Off On Auto	Temporarily store print jobs in the printer hard disk before printing. Notes: <ul style="list-style-type: none"> • Off is the factory default setting. • On buffers jobs on the printer hard disk. • Auto buffers print jobs only if the printer is busy processing data from another input port. • Changing this setting from the printer control panel and then exiting the menus causes the printer to restart. The menu selection is then updated.
Mac Binary PS On Off Auto	Set the printer to process Macintosh binary PostScript print jobs. Notes: <ul style="list-style-type: none"> • Auto is the factory default setting. • On processes raw binary PostScript print jobs. • Off filters print jobs using the standard protocol.
ENA Address YYY.yyy.yyy.yyy	Set the network address information for an external print server. Note: This menu is available only when the printer is attached to an external print server through the USB port.
ENA Netmask YYY.yyy.yyy.yyy	Set the netmask information for an external print server. Note: This menu is available only when the printer is attached to an external print server through the USB port.
ENA Gateway YYY.yyy.yyy.yyy	Set the gateway information for an external print server. Note: This menu is available only when the printer is attached to an external print server through the USB port.

Parallel [x] menu

Note: This menu appears only when an optional parallel card is installed.

Use	To
PCL SmartSwitch On Off	<p>Set the printer to automatically switch to PCL emulation when a print job received through a serial port requires it, regardless of the default printer language.</p> <p>Notes:</p> <ul style="list-style-type: none"> • On is the factory default setting. • When set to Off, the printer does not examine incoming data. The printer uses PostScript emulation if PS SmartSwitch is set to On. It uses the default printer language specified in the Setup menu if PS SmartSwitch is set to Off.
PS SmartSwitch On Off	<p>Set the printer to automatically switch to PS emulation when a print job received through a serial port requires it, regardless of the default printer language.</p> <p>Notes:</p> <ul style="list-style-type: none"> • On is the factory default setting. • When set to Off, the printer does not examine incoming data. The printer uses PCL emulation if PCL SmartSwitch is set to On. It uses the default printer language specified in the Setup menu if PCL SmartSwitch is set to Off.
NPA Mode On Off Auto	<p>Set the printer to perform the special processing required for bidirectional communication following the conventions defined by the NPA protocol.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Auto is the factory default setting. • Changing this setting from the printer control panel and then exiting the menus causes the printer to restart. The menu selection is then updated.
Parallel Buffer Disabled Auto 3K to [maximum size allowed]	<p>Set the size of the parallel input buffer.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Auto is the factory default setting. • Disabled turns off job buffering. Any print jobs already buffered on the printer hard disk are printed before normal processing resumes. • The parallel buffer size setting can be changed in 1-KB increments. • The maximum size allowed depends on the amount of memory in the printer, the size of the other link buffers, and whether Resource Save is set to On or Off. • To increase the maximum size range for the Parallel Buffer, disable or reduce the size of the USB, serial, and network buffers. • Changing this setting from the printer control panel and then exiting the menus causes the printer to restart. The menu selection is then updated.
Job Buffering Off On Auto	<p>Temporarily store print jobs on the printer hard disk before printing.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Off is the factory default setting. • On buffers print jobs on the printer hard disk. • Auto buffers print jobs only if the printer is busy processing data from another input port. • Changing this setting from the printer control panel and then exiting the menus causes the printer to restart. The menu selection is then updated.

Use	To
Advanced Status On Off	Enable bidirectional communication through the parallel port. Notes: <ul style="list-style-type: none"> • On is the factory default setting. • Off disables parallel port negotiation.
Protocol Standard Fastbytes	Specify the parallel port protocol. Notes: <ul style="list-style-type: none"> • Fastbytes is the factory default setting. It provides compatibility with most existing parallel ports and is the recommended setting. • Standard tries to resolve parallel port communication problems.
Honor Init On Off	Determine if the printer honors printer hardware initialization requests from the computer. Notes: <ul style="list-style-type: none"> • Off is the factory default setting. • The computer requests initialization by activating the Init signal from the parallel port. Many personal computers activate the Init signal each time the computer is turned on.
Parallel Mode 2 On Off	Determine if the parallel port data is sampled on the leading or trailing edge of a strobe. Note: On is the factory default setting.
Mac Binary PS On Off Auto	Set the printer to process Macintosh binary PostScript print jobs. Notes: <ul style="list-style-type: none"> • Auto is the factory default setting. • Off filters print jobs using the standard protocol. • On processes raw binary PostScript print jobs.
ENA Address yyyy.yyy.yyy.yyy	Set the network address information for an external print server. Note: This menu item is available only if the printer is attached to an external print server through the USB port.
ENA Netmask yyyy.yyy.yyy.yyy	Set the netmask information for an external print server. Note: This menu item is available only if the printer is attached to an external print server through the USB port.
ENA Gateway yyyy.yyy.yyy.yyy	Set the gateway information for an external print server. Note: This menu item is available only if the printer is attached to an external print server through the USB port.

SMTP Setup menu

Use	To
Primary SMTP Gateway	Specify SMTP server gateway and port information. Note: 25 is the default SMTP gateway port.
Primary SMTP Gateway Port	
Secondary SMTP Gateway	
Secondary SMTP Gateway Port	
SMTP Timeout 5–30	Specify the amount of time in seconds before the server stops trying to send an e-mail. Note: 30 seconds is the factory default setting.
Reply Address	Specify a reply address of up to 128 characters in the e-mail sent by the printer.
Use SSL Disabled Negotiate Required	Set the printer to use SSL for increased security when connecting to the SMTP server. Notes: <ul style="list-style-type: none"> • Disabled is the factory default setting. • When the Negotiate setting is used, the SMTP server determines if SSL will be used.
SMTP Server Authentication No authentication required Login/Plain CRAM-MD5 Digest-MD5 NTLM Kerberos 5	Specify the type of user authentication required for printing privileges. Note: “No authentication required” is the factory default setting.
Device-Initiated E-mail None Use Device SMTP Credentials	Specify what credentials will be used when communicating to the SMTP server. Some SMTP servers require credentials to send an e-mail. Notes: <ul style="list-style-type: none"> • None is the factory default setting for Device-Initiated E-mail. • Device Userid and Device Password are used to log in to the SMTP server when Use Device SMTP Credentials is selected.
Device Userid	
Device Password	

Security menu

Miscellaneous Security Settings menu

Use	To
Login Restrictions Login failures* Failure time frame* Lockout time* Panel Login Timeout Remote Login Timeout	<p>Limit the number and time frames of failed login attempts from the printer control panel before <i>all</i> users are locked out.</p> <p>Notes:</p> <ul style="list-style-type: none"> “Login failures” specifies the number of failed login attempts before users are locked out. Settings range from 1–10. 3 attempts is the factory default setting. “Failure time frame” specifies the time frame during which failed login attempts can be made before users are locked out. Settings range from 1–60 minutes. 5 minutes is the factory default setting. “Lockout time” specifies how long users are locked out after exceeding the login failures limit. Settings range from 1–60 minutes. 5 minutes is the factory default setting. Panel Login Timeout specifies how long the printer remains idle on the home screen before automatically logging the user off. Settings range from 1–900 seconds. 3 seconds is the factory default setting. Remote Login Timeout specifies how long a remote interface remains idle before automatically logging the user off. Settings range from 1–120 minutes. 10 minutes is the factory default setting.
Minimum PIN Length 1–16	<p>Limit the digit length of the PIN.</p> <p>Note: 4 is the factory default setting.</p>

* These menus appear only in touch-screen printer models.

Confidential Print menu

Use	To
Max Invalid PIN Off 2–10	<p>Limit the number of times an invalid PIN can be entered.</p> <p>Notes:</p> <ul style="list-style-type: none"> This menu appears only when a formatted, non-defective printer hard disk is installed. Once the limit is reached, the print jobs for that user name and PIN are deleted.
Confidential Job Expiration Off 1 hour 4 hours 24 hours 1 week	<p>Limit the amount of time a confidential print job stays in the printer before it is deleted.</p> <p>Notes:</p> <ul style="list-style-type: none"> If the “Confidential Job Expiration” setting is changed while confidential print jobs reside in the printer RAM or printer hard disk, then the expiration time for those print jobs does not change to the new default value. If the printer is turned off, then all confidential jobs held in the printer RAM are deleted.

Note: Off is the factory default setting.

Use	To
Repeat Job Expiration Off 1 hour 4 hours 24 hours 1 week	Set a time limit on how long the printer stores print jobs.
Verify Job Expiration Off 1 hour 4 hours 24 hours 1 week	Set a time limit on how long the printer stores print jobs needing verification.
Reserve Job Expiration Off 1 hour 4 hours 24 hours 1 week	Set a time limit on how long the printer stores print jobs for printing at a later time.
Note: Off is the factory default setting.	

Security Audit Log menu

Use	To
Export Log	Let an authorized user export the audit log. Notes: <ul style="list-style-type: none"> • To export the audit log from the printer control panel, connect a flash drive to the printer. • You can also download the audit log from the Embedded Web Server, and then save it on your computer.
Delete Log Delete now Do not delete	Specify whether or not audit logs are deleted. Note: Delete now is the factory default setting.

Use	To
Configure Log Enable Audit Yes No Enable Remote Syslog No Yes Remote Syslog Facility 0–23 Severity of events to log 0–7	Specify how and whether or not audit logs are created. Notes: <ul style="list-style-type: none"> Enable Audit determines if events are recorded in the secure audit log and remote syslog. No is the factory default setting. Enable Remote Syslog determines if logs are sent to a remote server. No is the factory default setting. Remote Syslog Facility determines the value used to send logs to the remote syslog server. 4 is the factory default setting. If the security audit log is activated, then the severity value of each event is recorded. 4 is the factory default setting.

Erase Temporary Data Files menu

Erase Temporary Data Files deletes *only* print job data on the printer hard disk that *are not* currently in use by the file system. All permanent data on the printer hard disk are preserved, such as downloaded fonts, macros, and held jobs.

Note: This menu appears only when a formatted, working printer hard disk is installed.

Use	To
Wiping Mode Auto	Specify the mode for erasing temporary data files.
Automatic Method Single pass Multiple pass	Mark all disk space used by a previous print job. This method does not permit the file system to reuse this space until it has been cleared. Notes: <ul style="list-style-type: none"> “Single pass” is the factory default setting. Only automatic wiping enables users to erase temporary data files without having to turn off the printer for an extended amount of time. Highly confidential information should be erased using <i>only</i> the Multiple pass method.

Set Date and Time menu

Use	To
Current Date and Time	Show the current date and time settings for the printer.
Manually Set Date and Time [input date/time]	Enter the date and time. Notes: <ul style="list-style-type: none"> For touch-screen printer models, date and time are set in YYYY-MM-DD HH:MM format. Manually setting the date and time sets Enable NTP to No. For non-touch-screen printer models, the wizard lets you set the date and time in YYYY-MM-DD-HH:MM format.

Use	To
Time Zone [list of time zones]	Select the time zone. Note: GMT is the factory default setting for non-touch-screen printer models.
Automatically observe DST On Off	Set the printer to use the applicable daylight saving time (DST) start and end times associated with the printer Time Zone setting. Note: On is the factory default setting.
Enable NTP On Off	Enable Network Time Protocol, which synchronizes the clocks of devices on a network. Notes: <ul style="list-style-type: none">• On is the factory default setting.• The setting is turned off if you manually set the date and time.

Settings menu

General Settings

General Settings menu

Use	To
Display Language English Francais Deutsch Italiano Espanol Dansk Norsk Nederlands Svenska Portuguese Suomi Russian Polski Greek Magyar Turkce Cesky Simplified Chinese Traditional Chinese Korean Japanese	Set the language of the text appearing on the printer display. Note: Not all languages are available for all printers, and you may need to install special hardware for those languages to appear.
Show Supply Estimates Show estimates Do not show estimates	Display the estimates of the supplies on the printer control panel, Embedded Web Server, menu settings, and the device statistics reports.

¹ This menu item appears only in touch-screen printer models.

² This menu item appears only in non-touch-screen printer models.

Use	To
Eco-Mode Off Energy Energy/Paper Paper	<p>Minimize the use of energy, paper, or specialty media.</p> <p>Notes:</p> <ul style="list-style-type: none"> For touch-screen printer models, touch Eco-Mode, and then select from the options. Off is the factory default setting. Off resets the printer to its factory default settings. Energy minimizes the power used by the printer. Energy/Paper minimizes the use of power and of paper and specialty media. Paper minimizes the amount of paper and specialty media needed for a print job.
Quiet Mode Off On	<p>Reduce the amount of noise produced by the printer.</p> <p>Notes:</p> <ul style="list-style-type: none"> For touch-screen printer models, touch Quiet Mode, and then select from the options. Off is the factory default setting. This setting supports the performance specifications for your printer. On configures the printer to produce as little noise as possible. This setting is best suited for printing text and line art. For optimal printing of color-rich documents, set Quiet Mode to Off. Selecting Photo from the printer driver may disable Quiet Mode and provide better print quality and full speed printing.
Run Initial setup Yes No	<p>Instruct the printer to run the setup wizard.</p> <p>Notes:</p> <ul style="list-style-type: none"> Yes is the factory default setting. After completing the setup wizard by selecting Done at the Country select screen, the default becomes No.

¹ This menu item appears only in touch-screen printer models.

² This menu item appears only in non-touch-screen printer models.

Use	To
Keyboard¹ Keyboard Type English Francais Francais Canadien Deutsch Italiano Espanol Greek Dansk Norsk Nederlands Svenska Suomi Portuguese Russian Polski Swiss German Swiss French Korean Magyar Turkish Czech Simplified Chinese Traditional Chinese Japanese Custom Key [x]	Specify a language and custom key information for the printer control panel keyboard. The additional tabs enable access to accent marks and symbols from the printer control panel keyboard.
Paper Sizes US Metric	Specify the unit of measurement for paper sizes. Notes: <ul style="list-style-type: none"> • US is the factory default setting. • The initial setting is determined by your country or region selection in the initial setup wizard.

¹ This menu item appears only in touch-screen printer models.

² This menu item appears only in non-touch-screen printer models.

Use	To
Displayed Information¹ Left side Right side Custom Text [x]	Specify what is displayed on the upper left and right corners of the home screen. For the Left side and Right side options, select from the following options: <ul style="list-style-type: none"> None IP Address Hostname Contact Name Location Date/Time mDNS/DDNS Service Name Zero Configuration Name Custom Text [x] Model Name <p>Notes:</p> <ul style="list-style-type: none"> • IP Address is the factory default setting for Left side. • Date/Time is the factory default setting for Right side.
Displayed Information (continued)¹ Black Toner	Customize the displayed information for Black Toner. Select from the following options: <ul style="list-style-type: none"> When to display <ul style="list-style-type: none"> Do not display Display Message to Display <ul style="list-style-type: none"> Default Alternate Default <ul style="list-style-type: none"> [text entry] Alternate <ul style="list-style-type: none"> [text entry] <p>Notes:</p> <ul style="list-style-type: none"> • “Do not display” is the factory default setting for When to display. • “Default” is the factory default setting for Message to Display.

¹ This menu item appears only in touch-screen printer models.

² This menu item appears only in non-touch-screen printer models.

Use	To
Displayed Information (continued)¹ <ul style="list-style-type: none"> Paper Jam Load Paper Service Errors 	Customize the displayed information for Waste Toner Bottle, Paper Jam, Load Paper, and Service Errors. Select from the following options: <ul style="list-style-type: none"> Display <ul style="list-style-type: none"> Yes No Message to Display <ul style="list-style-type: none"> Default Alternate Default <ul style="list-style-type: none"> [text entry] Alternate <ul style="list-style-type: none"> [text entry] <p>Notes:</p> <ul style="list-style-type: none"> • No is the factory default setting for Display. • Default is the factory default setting for Message to Display.
Home screen customization <ul style="list-style-type: none"> Change Language Search Held Jobs Held Jobs USB Drive Profiles and Solutions Bookmarks Jobs by user Forms and Favorites Eco-Settings Showroom Change Background 	Change the icons and buttons that appear on the home screen. For each icon or button, select from the following options: <ul style="list-style-type: none"> Display Do not display <p>Notes:</p> <ul style="list-style-type: none"> • “Display” is the factory default setting for Search Held Jobs, Held Jobs, USB Drive, Forms and Favorites, Eco-Settings, Showroom, and Change Background. • “Do not display” is the factory default setting for Change Language, Profiles and Solutions, Bookmarks, and Jobs by user. • “Bookmarks” appears inside Held Jobs only if Show Bookmarks is set to Yes and an active network cable is attached.
Date Format¹ <ul style="list-style-type: none"> MM-DD-YYYY DD-MM-YYYY YYYY-MM-DD 	Format the printer date. Note: MM-DD-YYYY is the US factory default setting.
Time Format¹ <ul style="list-style-type: none"> 12 hour A.M./P.M. 24 hour clock 	Format the printer time.
Screen Brightness¹ <ul style="list-style-type: none"> 20–100 	Specify the brightness of the printer display. Note: 100 is the factory default setting.

¹ This menu item appears only in touch-screen printer models.

² This menu item appears only in non-touch-screen printer models.

Use	To
Audio Feedback¹ Button Feedback On Off Volume 1–10	Specify whether icons and buttons have audio feedback. Notes: <ul style="list-style-type: none"> • On is the factory default setting for Button Feedback. • 5 is the factory default setting for Volume.
Show Bookmarks¹ Yes No	Specify whether bookmarks are displayed from the Held Jobs area. Note: Yes is the factory default setting. When Yes is selected, bookmarks appear in the Held Jobs area.
Web Page Refresh Rate¹ 30–300	Specify the number of seconds between Embedded Web Server refreshes. Note: 120 is the factory default setting.
Contact Name¹	Specify a contact name for the printer. Note: The contact name will be stored on the Embedded Web Server.
Location¹	Specify the location of the printer. Note: The location will be stored on the Embedded Web Server.
Timeouts Standby Mode¹ Disabled 1–240	Specify the number of minutes of inactivity before the printer enters a lower power state. Note: 15 is the factory default setting.
Timeouts Sleep Mode Disabled 1–120 min	Set the amount of time the printer waits after a job is printed before it goes into a reduced power state. Notes: <ul style="list-style-type: none"> • “30 min” is the factory default setting. • “Disabled” appears only when Energy Conserve is set to Off. • Lower settings conserve more energy, but may require longer warm-up times. • Select a high setting if the printer is in constant use. Under most circumstances, this keeps the printer ready to print with minimum warm-up time.

¹ This menu item appears only in touch-screen printer models.

² This menu item appears only in non-touch-screen printer models.

Use	To
Timeouts Hibernate Timeout Disabled 1 hour 2 hours 3 hours 6 hours 1 day 2 days 3 days 1 week 2 weeks 1 month	<p>Set the amount of time the printer waits before it enters Hibernate mode.</p> <p>Notes:</p> <ul style="list-style-type: none"> “Disabled” is the factory default setting in all countries except European Union countries and Switzerland. “3 days” is the factory default setting for all European Union countries and Switzerland.
Timeouts Hibernate Timeout on Connection Hibernate Do Not Hibernate	<p>Set the printer to Hibernate mode even if there is an active Ethernet connection.</p> <p>Note: “Do Not Hibernate” is the factory default setting.</p>
Timeouts Screen Timeout 15–300 sec	<p>Set the amount of time in seconds the printer waits before returning the display to the ready state.</p> <p>Note: “30 sec” is the factory default setting.</p>
Timeouts Prolong Screen Timeout On Off	<p>Display a message that lets you reset the screen timeout timer instead of returning to the home screen.</p> <p>Note: Off is the factory default setting.</p>
Timeouts Print Timeout Disabled 1–255 sec	<p>Set the amount of time in seconds the printer waits to receive an end-of-job message before canceling the remainder of the print job.</p> <p>Notes:</p> <ul style="list-style-type: none"> “90 sec” is the factory default setting. When the timer expires, any partially printed page still in the printer is printed. Print Timeout is available only when using PCL emulation. This setting has no effect on PostScript emulation print jobs.
Timeouts Wait Timeout Disabled 15–65535 sec	<p>Set the amount of time in seconds the printer waits for additional data before canceling a print job.</p> <p>Notes:</p> <ul style="list-style-type: none"> “40 sec” is the factory default setting. This setting has no effect on PCL emulation print jobs.

¹ This menu item appears only in touch-screen printer models.

² This menu item appears only in non-touch-screen printer models.

Use	To
Print Recovery Auto Continue Disabled 5–255 sec	Let the printer automatically continue printing from certain offline situations when these are not resolved within the specified time period. Note: Disabled is the factory default setting.
Print Recovery Jam Recovery On Off Auto	Specify whether the printer reprints jammed pages. Notes: <ul style="list-style-type: none"> Auto is the factory default setting. The printer reprints jammed pages unless the memory required to hold the pages is needed for other printer tasks. On sets the printer to always reprint jammed pages. Off sets the printer to never reprint jammed pages.
Print Recovery Jam Assist On Off	Notes: <ul style="list-style-type: none"> On is the factory default setting. On sets the printer to automatically dump or partially printed pages to the standard bin after a jammed page has been cleared. Off requires the user to remove all pages from all possible jam locations.
Print Recovery Page Protect Off On	Let the printer successfully print a page that may not have printed otherwise. Notes: <ul style="list-style-type: none"> Off is the factory default setting. Off prints a partial page when there is not enough memory to print the whole page. On sets the printer to process the whole page so that the entire page prints.
Hibernate Timeout on Connection Hibernate Do Not Hibernate	Set the printer to hibernate mode even there is an active Ethernet connection. Note: Do Not Hibernate is the factory default setting.
Press Sleep Button Do nothing Sleep Hibernate	Determine how the printer, while in idle state, reacts to a short press of the Sleep button. Note: Sleep is the factory default setting.
Press and Hold Sleep Button Do nothing Sleep Hibernate	Determine how the printer, while in idle state, reacts to a long press of the Sleep button. Note: "Do nothing" is the factory default setting.

¹ This menu item appears only in touch-screen printer models.

² This menu item appears only in non-touch-screen printer models.

Use	To
GUI Log Level¹ <ul style="list-style-type: none"> Everything (0) Keys (1) Debug (2) Warnings (3) Errors (4) Critical (5) System Info (6) 	Note: This setting only appears in debug builds.
Factory Defaults <ul style="list-style-type: none"> Do Not Restore Restore Now 	Return the printer settings to the factory default settings. Notes: <ul style="list-style-type: none"> • Do Not Restore is the factory default setting. Do Not Restore keeps the user-defined settings. • All downloads stored in the RAM are deleted. Downloads stored in the flash memory or in the printer hard disk are not affected.
Custom Home Message² <ul style="list-style-type: none"> Off IP Address Hostname Contact Name Location Zero Configuration Name Custom Text [x] 	Select a custom home message that appears as an alternating display of the printer status. Note: Off is the factory default setting.
Export Configuration Package¹ <ul style="list-style-type: none"> Export 	Export files from the flash drive.

¹ This menu item appears only in touch-screen printer models.

² This menu item appears only in non-touch-screen printer models.

Flash Drive

Flash Drive menu

Note: This menu appears only in touch-screen printer models.

Use	To
Copies <ul style="list-style-type: none"> 1–999 	Specify a default number of copies for each print job. Note: 1 is the factory default setting.
Paper Source <ul style="list-style-type: none"> Tray [x] Multipurpose Feeder Manual Paper Manual Envelope 	Set a default paper source for all print jobs. Note: Tray 1 (standard tray) is the factory default setting.

Use	To
Collate (1,1,1) (2,2,2) (1,2,3) (1,2,3)	Stack the pages of a print job in sequence when printing multiple copies. Note: "(1,2,3) (1,2,3)" is the factory default setting.
Sides (Duplex) 1 sided 2 sided	Specify whether prints are on one side or on both sides of the paper. Note: 1 sided is the factory default setting.
Duplex Binding Long Edge Short Edge	Define binding for duplexed pages in relation to paper orientation. Notes: <ul style="list-style-type: none"> • Long Edge is the factory default setting. Long Edge assumes binding along the long edge of the page (left edge for portrait and top edge for landscape). • Short Edge assumes binding along the short edge of the page (top edge for portrait and left edge for landscape).
Paper Saver Orientation Auto Landscape Portrait	Specify the orientation of a multiple-page document. Note: Auto is the factory default setting. The printer chooses between portrait and landscape.
Paper Saver Off 2-Up 3-Up 4-Up 6-Up 9-Up 12-Up 16-Up	Specify that multiple-page images be printed on one side of a paper. Notes: <ul style="list-style-type: none"> • Off is the factory default setting. • The number selected is the number of page images that will print per side.
Paper Saver Border None Solid	Print a border on each page image. Note: None is the factory default setting.
Paper Saver Ordering Horizontal Reverse Horizontal Reverse Vertical Vertical	Specify the positioning of multiple-page images. Notes: <ul style="list-style-type: none"> • Horizontal is the factory default setting. • Positioning depends on the number of page images and whether they are in portrait or landscape orientation.

Use	To
Separator Sheets Off Between Copies Between Jobs Between Pages	<p>Specify whether blank separator sheets are inserted.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Off is the factory default setting. No separator sheets are included in the print job. • Between Copies inserts a blank sheet between each copy of a print job if Collate is set to “(1,2,3) (1,2,3).” If Collate is set to “(1,1,1) (2,2,2),” then a blank page is inserted between each set of printed pages, such as after all page 1's and after all page 2's. • Between Jobs inserts a blank sheet between print jobs. • Between Pages inserts a blank sheet between each page of the print job. This setting is useful when printing transparencies or inserting blank pages in a document for notes.
Separator Sheet Source Tray [x] Multipurpose Feeder	<p>Specify the paper source for separator sheets.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Tray 1 (standard tray) is the factory default setting. • From the Paper menu, Configure MP must be set to Cassette in order for Multipurpose Feeder to appear as a menu setting.
Blank Pages Do Not Print Print	<p>Specify whether blank pages are inserted in a print job.</p> <p>Note: Do Not Print is the factory default setting.</p>

Print Settings

Setup menu

Use	To
Printer Language PCL Emulation PS Emulation	<p>Set the default printer language.</p> <p>Notes:</p> <ul style="list-style-type: none"> • PCL Emulation is the factory default setting. • PostScript emulation uses a PostScript interpreter for processing print jobs. • PCL Emulation uses a PCL interpreter for processing print jobs. • Setting a printer language default does not prevent a software program from sending print jobs that use another printer language.

Use	To
Print Area Normal Whole Page	<p>Set the logical and physical printable area.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Normal is the factory default setting. When attempting to print data in the non-printable area defined by the Normal setting, the printer clips the image at the boundary. • Whole Page allows the image to be moved into the non-printable area defined by the Normal setting. This setting affects only pages printed using a PCL 5e interpreter and has no effect on pages printed using the PCL XL or PostScript interpreter.
Download Target RAM Flash	<p>Set the storage location for downloads.</p> <p>Notes:</p> <ul style="list-style-type: none"> • RAM is the factory default setting. Storing downloads in the RAM is temporary. • Storing downloads in a flash memory or on a printer hard disk places them in permanent storage. Downloads remain in the flash memory or printer hard disk even when the printer is turned off. • This menu item appears only when a flash or disk option is installed.
Resource Save On Off	<p>Specify how the printer handles temporary downloads, such as fonts and macros stored in the RAM, when the printer receives a print job that requires more memory than is available.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Off is the factory default setting. Off sets the printer to retain downloads only until memory is needed. Downloads are deleted in order to process print jobs. • On sets the printer to retain downloads during language changes and printer resets. If the printer runs out of memory, then Memory Full 38 appears on the printer display, but downloads are not deleted.
Print All Order Alphabetical Oldest First Newest First	<p>Specify the order in which held and confidential jobs are printed when Print All Order is selected.</p> <p>Note: Alphabetical is the factory default setting.</p>

Finishing menu

Use	To
Sides (Duplex) 1 sided 2 sided	<p>Specify whether two-sided (duplex) printing is set as the default for all print jobs.</p> <p>Notes:</p> <ul style="list-style-type: none"> • “1 sided” is the factory default setting. • You can set two-sided printing from the software program. <p>For Windows users:</p> <ol style="list-style-type: none"> 1 Click File > Print. 2 Click Properties, Preferences, Options, or Setup. <p>For Macintosh users:</p> <ol style="list-style-type: none"> 1 Choose File > Print. 2 Adjust the settings from the print dialog and pop-up menus.
Duplex Binding Long Edge Short Edge	<p>Define the way two-sided pages are bound and printed.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Long Edge is the factory default setting. Long Edge binds pages along their long edge (left edge for portrait and top edge for landscape). • Short Edge binds pages along their short edge (top edge for portrait and left edge for landscape).
Copies 1–999	<p>Specify the default number of copies for each print job.</p> <p>Note: 1 is the factory default setting.</p>
Blank Pages Do Not Print Print	<p>Specify whether to insert blank pages in a print job.</p> <p>Note: Do Not Print is the factory default setting.</p>
Collate (1,1,1) (2,2,2) (1,2,3) (1,2,3)	<p>Stack the pages of a print job in sequence when printing multiple copies.</p> <p>Note: “(1,2,3) (1,2,3)” is the factory default setting.</p>
Separator Sheets Off Between Copies Between Jobs Between Pages	<p>Specify whether to insert blank separator sheets.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Off is the factory default setting. • Between Copies inserts a blank sheet between each copy of a print job if Collate is set to (1,1,1) (2,2,2). If Collate is set to (1,2,3) (1,2,3), then a blank page is inserted between each set of printed pages, such as after all page 2's and after all page 3's. • Between Jobs inserts a blank sheet between print jobs. • Between Pages inserts a blank sheet between each page of a print job. This setting is useful when printing transparencies or when inserting blank pages in a document.
Separator Source Tray [x] Multi-Purpose Feeder	<p>Specify the paper source for separator sheets.</p> <p>Note: Tray 1 (standard tray) is the factory default setting.</p>

Use	To
Paper Saver Off 2-Up 3-Up 4-Up 6-Up 9-Up 12-Up 16-Up	Print multiple-page images on one side of a paper. Notes: <ul style="list-style-type: none"> • Off is the factory default setting. • The number selected is the number of page images that will print per side.
Paper Saver Ordering Horizontal Reverse Horizontal Reverse Vertical Vertical	Specify the positioning of multiple-page images when using Paper Saver. Notes: <ul style="list-style-type: none"> • Horizontal is the factory default setting. • Positioning depends on the number of page images and whether they are in portrait or landscape orientation.
Paper Saver Orientation Auto Landscape Portrait	Specify the orientation of a multiple-page document. Note: Auto is the factory default setting. The printer chooses between portrait and landscape.
Paper Saver Border None Solid	Print a border when using Paper Saver. Note: None is the factory default setting.

Quality menu

Use	To
Print Resolution 300 dpi 600 dpi 1200 dpi 1200 Image Q 2400 Image Q	Specify the printed output resolution in dots per inch. Note: 600 dpi is the factory default setting.
Pixel Boost Off Fonts Horizontally Vertically Both directions Isolated	Enable more pixels to print in clusters for clarity, in order to enhance images horizontally or vertically, or to enhance fonts. Note: Off is the factory default setting.
Toner Darkness 1–10	Lighten or darken the printed output. Notes: <ul style="list-style-type: none"> • 8 is the factory default setting. • Selecting a smaller number can help conserve toner.

Use	To
Enhance Fine Lines On Off	Enable a print mode preferable for files such as architectural drawings, maps, electrical circuit diagrams, and flow charts. Notes: <ul style="list-style-type: none"> • Off is the factory default setting. • You can set this option from the printer software. For Windows users, click File > Print, and then click Properties, Preferences, Options, or Setup. For Macintosh users, choose File > Print, and then adjust the settings from the Print dialog and pop-up menus. • To set this option using the Embedded Web Server, type the network printer IP address in the Web browser address field.
Gray Correction Auto Off	Automatically adjust the contrast enhancement applied to images. Note: Auto is the factory default setting.
Brightness -6 to 6	Adjust the printed output either by lightening or darkening it. You can conserve toner by lightening the output. Note: 0 is the factory default setting.
Contrast 0–5	Adjust the contrast of printed objects. Note: 0 is the factory default setting.

Job Accounting menu

Note: This menu item appears only when a formatted, non-defective printer hard disk is installed. Make sure the printer hard disk is not read/write- or write-protected.

Use	To
Job Accounting Log Off On	Determine and set if the printer creates a log of the print jobs it receives. Note: Off is the factory default setting.
Job Accounting Utilities	Print and delete log files or export them to a flash drive.
Accounting Log Frequency Weekly Monthly	Determine and set how often a log file is created. Note: Monthly is the factory default setting.
Log Action at End of Frequency None E-mail Current Log E-mail & Delete Current Log Post Current Log Post & Delete Current Log	Determine and set how the printer responds when the frequency threshold expires. Note: None is the factory default setting.
Disk Near Full Level Off 1–99	Specify the maximum size of the log file before the printer executes the Disk Near Full Action. Note: 5 is the factory default setting.

Use	To
Disk Near Full Action None E-mail Current Log E-mail & Delete Current Log E-mail & Delete Oldest Log Post Current Log Post & Delete Current Log Post & Delete Oldest Log Delete Current Log Delete Oldest Log Delete All Logs Delete All But Current	<p>Determine and set how the printer responds when the printer hard disk is nearly full.</p> <p>Notes:</p> <ul style="list-style-type: none"> • None is the factory default setting. • The value defined in Disk Near Full Level determines when this action is triggered.
Disk Full Action None E-mail & Delete Current Log E-mail & Delete Oldest Log Post & Delete Current Log Post & Delete Oldest Log Delete Current Log Delete Oldest Log Delete All Logs Delete All But Current	<p>Determine and set how the printer responds when disk usage reaches the maximum limit (100MB).</p> <p>Note: None is the factory default setting.</p>
URL to Post Logs	Determine and set where the printer posts job accounting logs.
E-mail Address to Send Logs	Specify the e-mail address to which the device sends job accounting logs.
Log File Prefix	<p>Specify the prefix you want for the log file name.</p> <p>Note: The current host name defined in the TCP/IP menu is used as the default log file prefix.</p>

Utilities menu

Use	To
Remove Held Jobs Confidential Held Not Restored All	<p>Delete confidential and held jobs from the printer hard disk.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Selecting a setting affects only print jobs that are resident in the printer. Bookmarks, print jobs on flash drives, and other types of held jobs are not affected. • Not Restored removes all Print and Hold jobs that are <i>not</i> restored from the printer hard disk or memory.

Use	To
Format Flash Yes No	<p>Format the flash memory.</p> <p>Warning—Potential Damage: Do not turn off the printer while the flash memory is being formatted.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Yes deletes all data stored in flash memory. • No cancels the format request. • Flash memory refers to the memory added by installing a flash memory card in the printer. • The flash memory option card must not be read/write- or write-protected. • This menu item appears only when a non-defective flash memory card is installed.
Delete Downloads on Disk Delete Now Do Not Delete	<p>Delete downloads from the printer hard disk, including all held jobs, buffered jobs, and parked jobs.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Delete Now sets the printer to delete the downloads and allows the display to return to the originating screen after the deletion. • Do Not Delete sets the printer display to return to the main Utilities menu for touch-screen printer models. When selected in non-touch-screen printer models, Do Not Delete sets the printer to return to the originating screen after the deletion.
Activate Hex Trace	<p>Assist in isolating the source of a print job problem.</p> <p>Notes:</p> <ul style="list-style-type: none"> • When activated, all data sent to the printer is printed in hexadecimal and character representation, and control codes are not executed. • To exit or deactivate Hex Trace, turn off or reset the printer.
Coverage Estimator Off On	<p>Provide an estimate of the percentage coverage of toner on a page. The estimate is printed on a separate page at the end of each print job.</p> <p>Note: Off is the factory default setting.</p>

XPS menu

Use	To
Print Error Pages Off On	<p>Print a page containing information on errors, including XML markup errors.</p> <p>Note: Off is the factory default setting.</p>

PDF menu

Use	To
Scale to Fit Yes No	<p>Scale page content to fit the selected paper size.</p> <p>Note: No is the factory default setting.</p>

Use	To
Annotations Do Not Print Print	Print annotations in a PDF. Note: Do Not Print is the factory default setting.

PostScript menu

Use	To
Print PS Error On Off	Print a page containing the PostScript error. Note: Off is the factory default setting.
Lock PS Startup Mode On Off	Disable the SysStart file. Note: Off is the factory default setting.
Font Priority Resident Flash/Disk	Establish the font search order. Notes: <ul style="list-style-type: none"> • Resident is the factory default setting. • This menu item is available only when a formatted flash memory option card or printer hard disk is installed and operating properly. • Make sure the flash memory option or printer hard disk is not read/write-, write-, or password-protected. • Job Buffer Size must not be set to 100%.

PCL Emul menu

Use	To
Font Source Resident Download Flash All	Specify the set of fonts used by the Font Name menu. Notes: <ul style="list-style-type: none"> • “Resident” is the factory default setting. “Resident” shows the factory default set of fonts downloaded in the RAM. • “Download” shows all the fonts downloaded in the RAM. • “Flash” shows all fonts resident in that option. The optional flash memory card must be properly formatted and cannot be read/write-, write-, or password-protected. • “All” shows all fonts available to any option.
Font Name Courier 10	Identify a specific font and the option where it is stored. Note: Courier 10 is the factory default setting. Courier 10 shows the font name, font ID, and the storage location in the printer. The font source abbreviation is R for Resident, F for Flash, and D for Download.

Use	To
Symbol Set 10U PC-8 12U PC-850	<p>Specify the symbol set for each font name.</p> <p>Notes:</p> <ul style="list-style-type: none"> • 10U PC-8 is the U.S. factory default setting. 12U PC-850 is the international factory default setting. • A symbol set is a set of alphabetic and numeric characters, punctuation, and special symbols. Symbol sets support the different languages or specific program, such as math symbols for scientific text. Only the supported symbol sets are shown.
PCL Emulation Settings Point Size 1.00–1008.00	<p>Change the point size for scalable typographic fonts.</p> <p>Notes:</p> <ul style="list-style-type: none"> • 12 is the factory default setting. • Point size refers to the height of the characters in the font. One point equals approximately 0.014 inch. • Point sizes can be increased or decreased in 0.25-point increments.
PCL Emulation Settings Pitch 0.08–100	<p>Specify the font pitch for scalable monospaced fonts.</p> <p>Notes:</p> <ul style="list-style-type: none"> • 10 is the factory default setting. • Pitch refers to the number of fixed-space characters per inch (cpi). • Pitch can be increased or decreased in 0.01-cpi increments. • For non-scalable monospaced fonts, the pitch appears on the display but it cannot be changed.
PCL Emulation Settings Orientation Portrait Landscape	<p>Specify the orientation of text and graphics on the page.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Portrait is the factory default setting. Portrait prints text and graphics parallel to the short edge of the page. • Landscape prints text and graphics parallel to the long edge of the page.
PCL Emulation Settings Lines per Page 1–255	<p>Specify the number of lines that print on each page.</p> <p>Notes:</p> <ul style="list-style-type: none"> • 60 is the U.S. factory default setting. 64 is the international default setting. • The printer sets the amount of space between each line based on the Lines per Page, Paper Size, and Orientation settings. Select the Paper Size and Orientation you want before setting Lines per Page.
PCL Emulation Settings A4 Width 198 mm 203 mm	<p>Set the printer to print on A4-size paper.</p> <p>Notes:</p> <ul style="list-style-type: none"> • 198 mm is the factory default setting. • The 203-mm setting sets the width of the page to allow printing of eighty 10-pitch characters.

Use	To
PCL Emulation Settings Auto CR after LF On Off	Specify whether the printer automatically performs a carriage return (CR) after a line feed (LF) control command. Note: Off is the factory default setting.
PCL Emulation Settings Auto LF after CR On Off	Specify whether the printer automatically performs a line feed (LF) after a carriage return (CR) control command. Note: Off is the factory default setting.
Tray Renumber Assign Multipurpose Feeder Off None 0–199 Assign Tray [x] Off None 0–199 Assign Manual Paper Off None 0–199 Assign Manual Env Off None 0–199	Configure the printer to work with printer software or programs that use different source assignments for trays and feeders. Notes: <ul style="list-style-type: none"> Off is the factory default setting. None cannot be selected. It is only displayed when it is selected by the PCL 5 interpreter. It also ignores the Select Paper Feed command. 0–199 allows a custom setting to be assigned.
Tray Renumber View Factory Defaults MPF Default = 8 T1 Default = 1 T2 Default = 4 T3 Default = 5 T4 Default = 20 T5 Default = 21 Env Default = 6 MPaper Default = 2 MEnv Default = 3	Display the factory default setting assigned to each tray or feeder.
Tray Renumber Restore Defaults Yes No	Restore all tray and feeder assignments to their factory default settings.

HTML menu

Use	To
Font Name Albertus MT Antique Olive Apple Chancery Arial MT Avant Garde Bodoni Bookman Chicago Clarendon Cooper Black Copperplate Coronet Courier Eurostile Garamond Geneva Gill Sans Goudy Helvetica Hoefler Text Intl CG Times Intl Courier Intl Univers	Joanna MT Letter Gothic Lubalin Graph Marigold MonaLisa Recut Monaco New CenturySbk New York Optima Oxford Palatino StempelGaramond Taffy Times TimesNewRoman Univers Zapf Chancery NewSansMTCS NewSansMTCT New SansMTJA NewSansMTKO

Use	To
Font Size 1–255 pt	Set the default font size for HTML documents. Notes: <ul style="list-style-type: none"> • 12 pt is the factory default setting. • Font size can be increased in 1-point increments.
Scale 1–400%	Scale the default font for HTML documents. Notes: <ul style="list-style-type: none"> • 100% is the factory default setting. • Scaling can be increased in 1% increments.
Orientation Portrait Landscape	Set the page orientation for HTML documents. Note: Portrait is the factory default setting.

Use	To
Margin Size 8–255 mm	Set the page margin for HTML documents. Notes: <ul style="list-style-type: none"> • 19 mm is the factory default setting. • Margin size can be increased in 1-mm increments.
Backgrounds Do Not Print Print	Specify whether to print backgrounds on HTML documents. Note: Print is the factory default setting.

Image menu

Use	To
Auto Fit On Off	Select the optimal paper size, scaling, and orientation. Note: On is the factory default setting. It overrides scaling and orientation settings for some images.
Invert On Off	Invert bitonal monochrome images. Notes: <ul style="list-style-type: none"> • Off is the factory default setting. • This setting does not apply to GIF or JPEG images.
Scaling Anchor Top Left Best Fit Anchor Center Fit Height/Width Fit Height Fit Width	Scale the image to fit the selected paper size. Notes: <ul style="list-style-type: none"> • Best Fit is the factory default setting. • When Auto Fit is set to On, Scaling is automatically set to Best Fit.
Orientation Portrait Landscape Reverse Portrait Reverse Landscape	Set the image orientation. Note: Portrait is the factory default setting.

Help menu

The Help menu consists of a series of Help pages that are stored in the printer as PDFs. They contain information about using the printer and performing printing tasks.

English, French, German, and Spanish translations are stored in the printer. Other translations are available at <http://support.lexmark.com>.

Use	To
Print All Guides	Print all the guides.
Print Quality	Print information about solving print quality issues.

Use	To
Printing Guide	Print information about loading paper and other specialty media.
Media Guide	Print a list of the paper sizes supported in trays and feeders.
Print Defects Guide	Print information about resolving print defects.
Menu Map	Print a list of the printer control panel menus and settings.
Information Guide	Print a guide in locating additional information.
Connection Guide	Print information about connecting the printer locally (USB) or to a network.
Moving Guide	Print instructions for safely moving the printer.
Supplies Guide	Print part numbers for ordering supplies.

Saving money and the environment

Saving paper and toner

Studies show that as much as 80% of the carbon footprint of a printer is related to paper usage. You can significantly reduce your carbon footprint by using recycled paper and the following printing suggestions, such as printing on both sides of the paper and printing multiple pages on one side of a single sheet of paper.

For information on how you can quickly save paper and energy using one printer setting, see “Using Eco-Mode” on page 104.

Using recycled paper

As an environmentally conscious company, Lexmark supports the use of recycled office paper produced specifically for use in laser printers. For more information on recycled papers that work well with your printer, see “Using recycled paper and other office papers” on page 118.

Conserving supplies

Use both sides of the paper

If your printer model supports duplex printing, then you can control whether print appears on one or two sides of the paper by selecting **2-sided printing** from the Print dialog or from the Lexmark Toolbar.

Place multiple pages on one sheet of paper

You can print up to 16 consecutive pages of a multiple-page document onto one side of a single sheet of paper by selecting a setting from the Multipage printing (N-Up) section of the Print dialog screen.

Check your first draft for accuracy

Before printing or making multiple copies of a document:

- Use the preview feature, which you can select from the Print dialog or from the Lexmark Toolbar to see how the document will look like before you print it.
- Print one copy of the document to check its content and format for accuracy.

Avoid paper jams

Correctly set the paper type and size to avoid paper jams. For more information, see “Avoiding jams” on page 181.

Recycling

Lexmark provides collection programs and environmentally progressive approaches to recycling. For more information, see:

- The Notices chapter
- The Environmental Sustainability section of the Lexmark Web site at www.lexmark.com/environment

- The Lexmark recycling program at www.lexmark.com/recycle

Recycling Lexmark products

To return Lexmark products for recycling:

- 1 Go to www.lexmark.com/recycle.
- 2 Find the product type you want to recycle, and then select your country or region from the list.
- 3 Follow the instructions on the computer screen.

Note: Printer supplies and hardware not listed in the Lexmark collection program may be recycled through your local recycling center. Contact your local recycling center to determine the items they accept.

Recycling Lexmark packaging

Lexmark continually strives to minimize packaging. Less packaging helps to ensure that Lexmark printers are transported in the most efficient and environmentally sensitive manner and that there is less packaging to dispose of. These efficiencies result in fewer greenhouse emissions, energy savings, and natural resource savings.

Lexmark cartons are 100% recyclable where corrugated recycling facilities exist. Facilities may not exist in your area.

The foam used in Lexmark packaging is recyclable where foam recycling facilities exist. Facilities may not exist in your area.

When you return a cartridge to Lexmark, you can reuse the box that the cartridge came in. Lexmark will recycle the box.

Returning Lexmark cartridges for reuse or recycling

Lexmark Cartridge Collection Program diverts millions of Lexmark cartridges from landfills annually by making it both easy and free for Lexmark customers to return used cartridges to Lexmark for reuse or recycling. One hundred percent of the empty cartridges returned to Lexmark are either reused or demanufactured for recycling. Boxes used to return the cartridges are also recycled.

To return Lexmark cartridges for reuse or recycling, follow the instructions that came with your printer or cartridge and use the prepaid shipping label. You can also do the following:

- 1 Go to www.lexmark.com/recycle.
- 2 From the Toner Cartridges section, select your country or region.
- 3 Follow the instructions on the computer screen.

Maintaining the printer

Warning—Potential Damage: Failure to maintain optimum printer performance, or to replace parts and supplies, may cause damage to your printer.

Cleaning the printer

Cleaning the printer

Note: You may need to perform this task after every few months.

Warning—Potential Damage: Damage to the printer caused by improper handling is not covered by the printer warranty.

- 1 Make sure that the printer is turned off and unplugged from the electrical outlet.



CAUTION—SHOCK HAZARD: To avoid the risk of electrical shock when cleaning the exterior of the printer, unplug the power cord from the electrical outlet and disconnect all cables from the printer before proceeding.

- 2 Remove paper from the standard bin and multipurpose feeder.
- 3 Remove any dust, lint, and pieces of paper around the printer using a soft brush or vacuum.
- 4 Dampen a clean, lint-free cloth with water, and use it to wipe the outside of the printer.

Warning—Potential Damage: Do not use household cleaners or detergents to prevent damage to the exterior of the printer.

- 5 Make sure all areas of the printer are dry before sending a new print job.

Ordering parts and supplies

To order supplies in the U.S., contact Lexmark at 1-800-539-6275 for information about Lexmark authorized supplies dealers in your area. In other countries or regions, visit the Lexmark Web site at www.lexmark.com or contact the place where you purchased the printer.

Using genuine Lexmark parts and supplies

Your Lexmark printer is designed to function best with genuine Lexmark supplies and parts. Use of third-party supplies or parts may affect the performance, reliability, or life of the printer and its imaging components. Use of third-party supplies or parts can affect warranty coverage. Damage caused by the use of third-party supplies or parts is not covered by the warranty. All life indicators are designed to function with Lexmark supplies and parts, and may deliver unpredictable results if third-party supplies or parts are used. Imaging component usage beyond the intended life may damage your Lexmark printer or its associated components.

Ordering toner cartridges

Notes:

- The estimated cartridge yield is based on the ISO/IEC 19752 standard.
- Extremely low print coverage for extended periods of time may negatively affect actual yield.

Item	Return Program cartridge
For the United States and Canada	
Toner Cartridge	501
High Yield Toner Cartridge	501H
Extra High Yield Toner Cartridge	501X ¹
Ultra High Yield Toner Cartridge	501U ²
For the European Union, European Economic Area , and Switzerland	
Toner Cartridge	502
High Yield Toner Cartridge	502H
Extra High Yield Toner Cartridge	502X ¹
Ultra High Yield Toner Cartridge	502U ²
For the Asia Pacific Region (includes Australia and New Zealand)	
Toner Cartridge	503
High Yield Toner Cartridge	503H
Extra High Yield Toner Cartridge	503X ¹
Ultra High Yield Toner Cartridge	503U ²
For Latin America (includes Puerto Rico and Mexico)	
Toner Cartridge	504
High Yield Toner Cartridge	504H
Extra High Yield Toner Cartridge	504X ¹
Ultra High Yield Toner Cartridge	504U ²
For Africa, Middle East, Central Eastern Europe, and Commonwealth of Independent States	
Toner Cartridge	505
High Yield Toner Cartridge	505H
Extra High Yield Toner Cartridge	505X ¹
Ultra High Yield Toner Cartridge	505U ²

¹ This cartridge is supported only in MS410d, MS410dn, MS510dn, MS610dn, and MS610de printer models.

² This cartridge is supported only in MS510dn, MS610dn, and MS610de printer models.

For more information on countries located in each region, visit www.lexmark.com/regions.

Item	Regular cartridge
Worldwide	
High Yield Toner Cartridge	500HA ¹
Extra High Yield Toner Cartridge	500XA ²
Ultra High Yield Toner Cartridge	500UA ³
¹ This cartridge is supported only in MS310d and MS310dn printer models. ² This cartridge is supported only in MS410d and MS410dn printer models. ³ This cartridge is supported only in MS510dn, MS610dn, and MS610de printer models.	

Ordering an imaging unit

Extremely low print coverage for extended periods of time may cause imaging unit parts to fail prior to exhaustion of toner from toner cartridge.

For more information on replacing the imaging unit, see the instruction sheet that came with the supply.

Part name	Lexmark Return Program	Regular
Imaging unit	500Z	500ZA

Ordering a maintenance kit

Notes:

- Using certain types of paper may require more frequent replacement of the maintenance kit.
- The separator roller, fuser, pick rollers, transfer roller, and redrive assembly are all included in the maintenance kit and can be individually ordered and replaced if necessary.
- Contact your service representative to replace the maintenance kit.

Printer model	Part number
MS510dn (100v)	40X8439*
MS610dn (100v)	40X8440*
MS610de (100v)	40X8441*
MS510dn (110v)	40X8281
MS610dn (110v)	40X8433
MS610de (110v)	40X8434
MS510dn (220v)	40X8282
MS610dn (220v)	40X8435
MS610de (220v)	40X8436

* This kit is available only in Japan.

Estimated number of remaining pages

The estimated number of remaining pages is based on the recent printing history of the printer. Its accuracy may vary significantly and is dependent on many factors, such as actual document content, print quality settings, and other printer settings.

The accuracy of the estimated number of remaining pages may decrease when the actual printing consumption is different from the historical printing consumption. Consider the variable level of accuracy before purchasing or replacing supplies based on the estimate. Until an adequate print history is obtained on the printer, initial estimates assume future supplies consumption based on the International Organization for Standardization* test methods and page content.

* Average continuous black declared cartridge yield in accordance with ISO/IEC 19752.

Storing supplies

Choose a cool, clean storage area for the printer supplies. Store supplies right side up in their original packing until you are ready to use them.

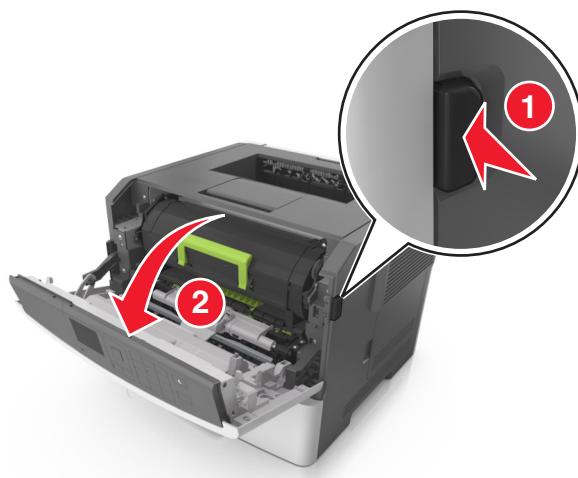
Do not expose supplies to:

- Direct sunlight
- Temperatures above 35°C (95°F)
- High humidity above 80%
- Salty air
- Corrosive gases
- Heavy dust

Replacing supplies

Replacing the toner cartridge

1 Press the button on the right side of the printer, and then open the front door.



- 2 Pull the toner cartridge out using the handle.



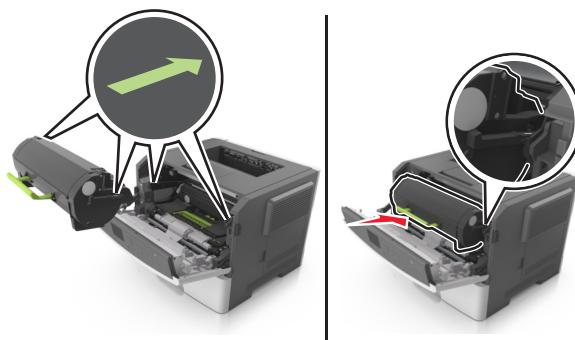
- 3 Unpack the toner cartridge, and then remove all packing materials.

- 4 Shake the new cartridge to redistribute the toner.



- 5 Insert the toner cartridge into the printer by aligning the side rails of the cartridge with the arrows on the side rails inside the printer.

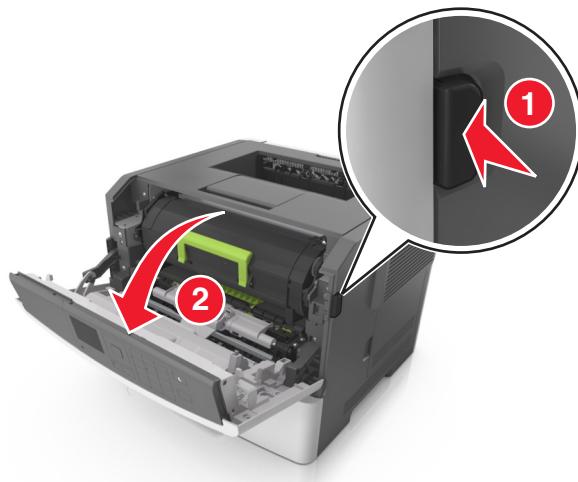
Warning—Potential Damage: Do not expose the imaging unit to direct light for more than 10 minutes. Extended exposure to light may cause print quality problems.



- 6 Close the front door.

Replacing the imaging unit

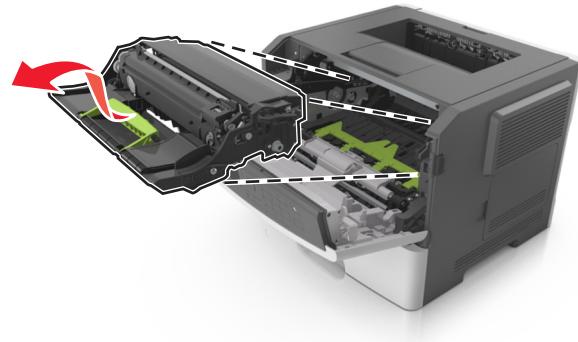
- 1 Press the button on the right side of the printer, and then open the front door.



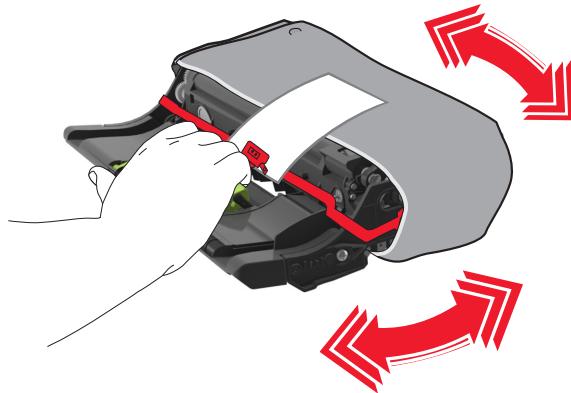
- 2 Pull the toner cartridge out using the handle.



- 3 Lift the green handle, and then pull the imaging unit out of the printer.



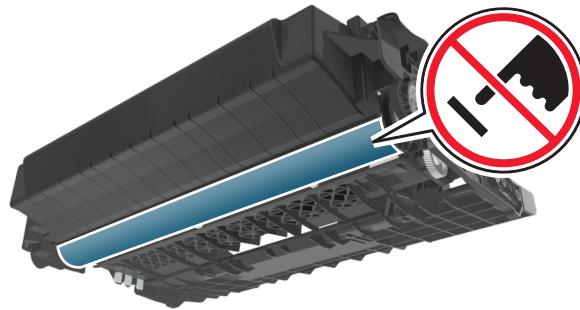
- 4 Unpack the new imaging unit, and then shake it.



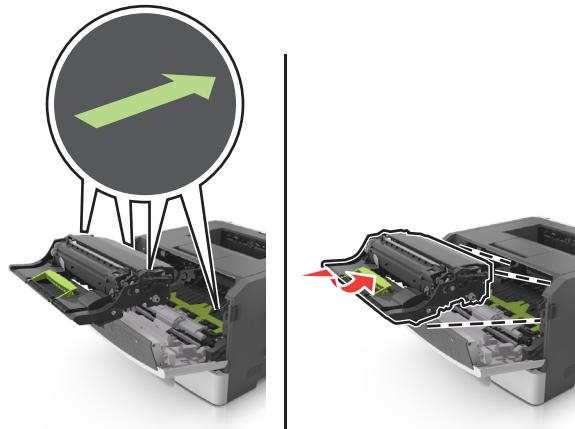
- 5 Remove all packing materials from the imaging unit.

Warning—Potential Damage: Do not expose the imaging unit to direct light for more than 10 minutes. Extended exposure to light may cause print quality problems.

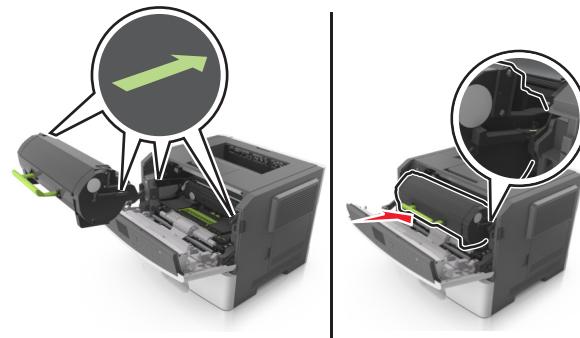
Warning—Potential Damage: Do not touch the photoconductor drum. Doing so may affect the print quality of future print jobs.



- 6 Insert the imaging unit into the printer by aligning the arrows on the side rails of the imaging unit with the arrows on the side rails inside the printer.



- 7 Insert the toner cartridge into the printer by aligning the side rails of the cartridge with the arrows on the side rails inside the printer.



- 8 Close the front door.

Moving the printer

Before moving the printer

! CAUTION—POTENTIAL INJURY: Before moving the printer, follow these guidelines to avoid personal injury or printer damage:

- Turn the printer off using the power switch, and then unplug the power cord from the electrical outlet.
- Disconnect all cords and cables from the printer before moving it.
- If an optional tray is installed, then remove it from the printer. To remove the optional tray, slide the latch on the right side of the tray toward the front of the tray until it *clicks* into place.



- Use the handholds located on both sides of the printer to lift it.
- Make sure your fingers are not under the printer when you set it down.
- Before setting up the printer, make sure there is adequate clearance around it.

Use only the power cord provided with this product or the manufacturer's authorized replacement.

Warning—Potential Damage: Damage to the printer caused by improper moving is not covered by the printer warranty.

Moving the printer to another location

The printer and its hardware options can be safely moved to another location by following these precautions:

- Any cart used to move the printer must have a surface able to support the full footprint of the printer.
- Any cart used to move the hardware options must have a surface able to support the dimensions of the hardware options.
- Keep the printer in an upright position.
- Avoid severe jarring movements.

Shipping the printer

When shipping the printer, use the original packaging or call the place of purchase for a relocation kit.

Clearing jams

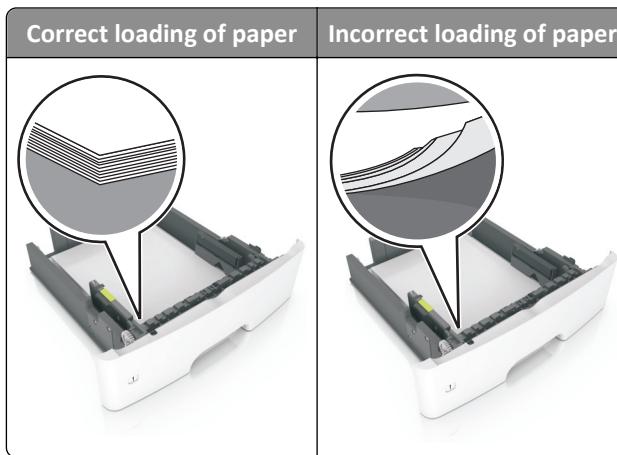
By carefully selecting paper and specialty media and loading it properly, you should be able to avoid most jams. If jams occur, then follow the steps outlined in this chapter.

Warning—Potential Damage: Never use any tool to remove a jam. Doing so could permanently damage the fuser.

Avoiding jams

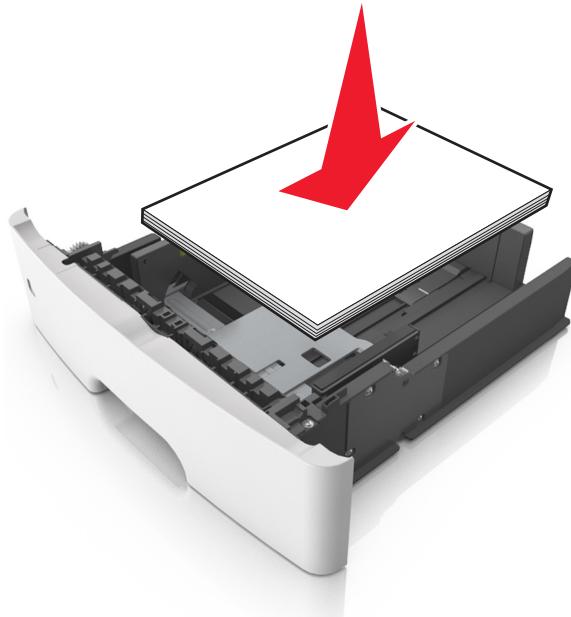
Load paper properly

- Make sure paper lies flat in the tray.



- Do not remove a tray while the printer is printing.
- Do not load a tray while the printer is printing. Load it before printing, or wait for a prompt to load it.
- Do not load too much paper. Make sure the stack height is below the maximum paper fill indicator.

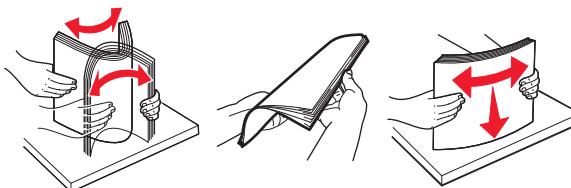
- Do not slide the paper into the tray. Load paper as shown in the illustration.



- Make sure the guides in the tray or the multipurpose feeder are properly positioned and are not pressing tightly against the paper or envelopes.
- Push the tray firmly into the printer after loading paper.

Use recommended paper

- Use only recommended paper or specialty media.
- Do not load wrinkled, creased, damp, bent, or curled paper.
- Flex, fan, and straighten paper before loading it.



- Do not use paper that has been cut or trimmed by hand.
- Do not mix paper sizes, weights, or types in the same tray.
- Make sure the paper size and type are set correctly on the Embedded Web Server or the computer.

Note: Depending on your operating system, access the Paper menu using Local Printer Settings Utility or Printer Settings.

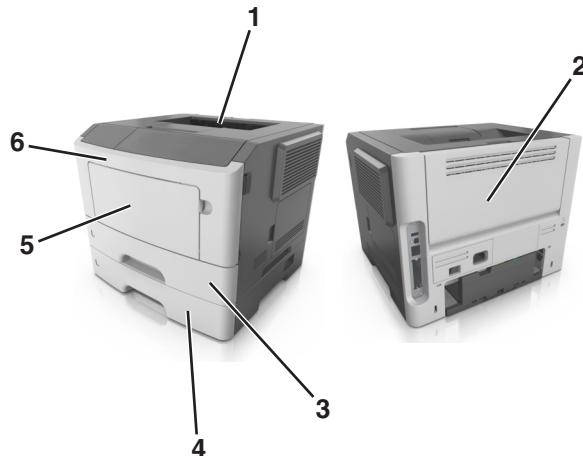
- Store paper according to manufacturer recommendations.

Understanding jam messages and locations

When a jam occurs, a message indicating the jam location and information to clear the jam appears on the printer display. Open the doors, covers, and trays indicated on the display to remove the jam.

Notes:

- When Jam Assist is set to On, the printer automatically flushes blank pages or pages with partial prints to the standard bin after a jammed page has been cleared. Check your printed output stack for discarded pages.
- When Jam Recovery is set to On or Auto, the printer reprints jammed pages. However, the Auto setting does not guarantee that the page will print.

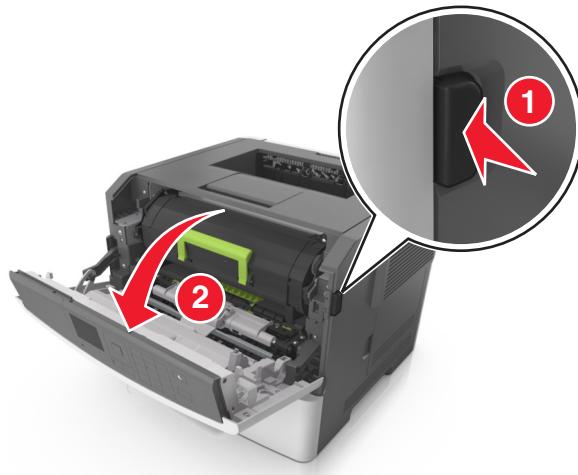


	Area	Printer control panel message	What to do
1	Standard bin	[x]-page jam, clear standard bin. [20y.xx]	Remove the jammed paper.
2	Rear door	[x]-page jam, open rear door. [20y.xx]	Open the rear door, and then remove the jammed paper.
3	Tray 1	[x]-page jam, remove tray 1 to clear duplex. [23y.xx]	Pull tray 1 completely out, then push the front duplex flap down, and then remove the jammed paper. Note: You may need to open the rear door to clear some 23y.xx paper jams.
4	Tray [x]	[x]-page jam, remove tray [x]. [24y.xx]	Pull the indicated tray out, and then remove the jammed paper.
5	Multipurpose feeder	[x]-page jam, clear manual feeder. [250.xx]	Remove all paper from the multipurpose feeder, and then remove the jammed paper.
6	Front door	[x]-page jam, open front door. [20y.xx]	Open the front door, then remove the toner cartridge, imaging unit, and jammed paper.

[x]-page jam, open front door. [20y.xx]

 **CAUTION—HOT SURFACE:** The inside of the printer might be hot. To reduce the risk of injury from a hot component, allow the surface to cool before touching it.

- 1 Press the button on the right side of the printer, and then open the front door.



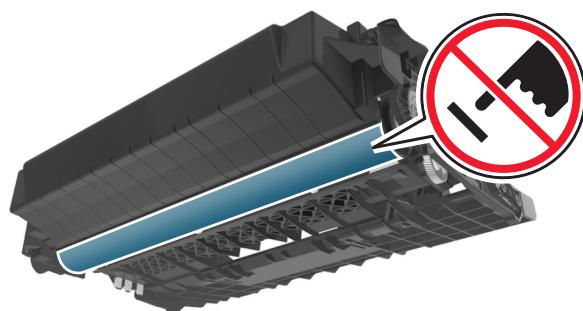
- 2 Pull out the toner cartridge using the handle.



- 3 Lift the green handle, and then pull out the imaging unit from the printer.



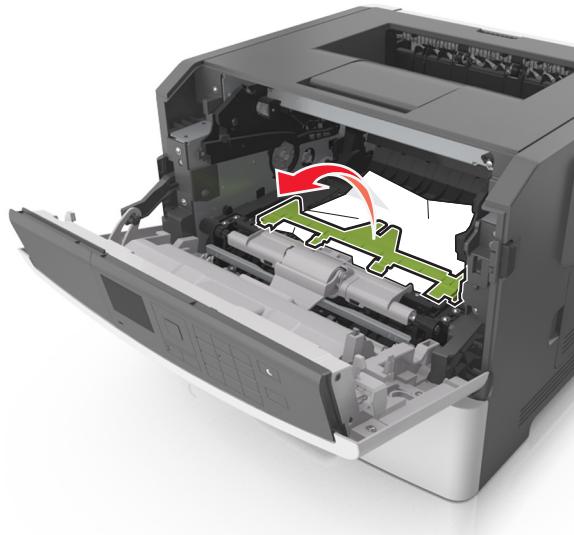
Warning—Potential Damage: Do not touch the shiny blue photoconductor drum under the imaging unit. Doing so may affect the quality of future print jobs.



- 4 Place the imaging unit aside on a flat, smooth surface.

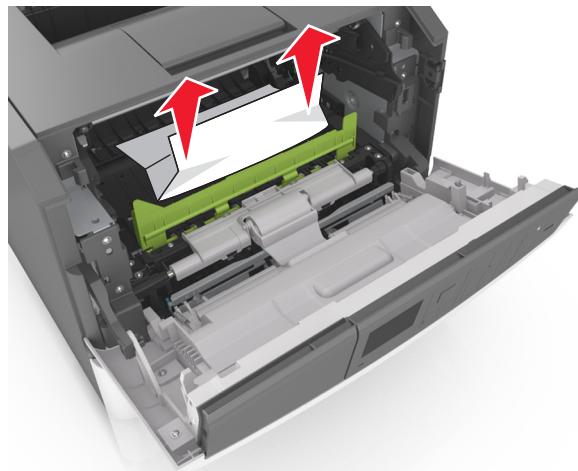
Warning—Potential Damage: Do not expose the imaging unit to direct light for more than 10 minutes. Extended exposure to light may cause print quality problems.

- 5 Lift the green flap in front of the printer.

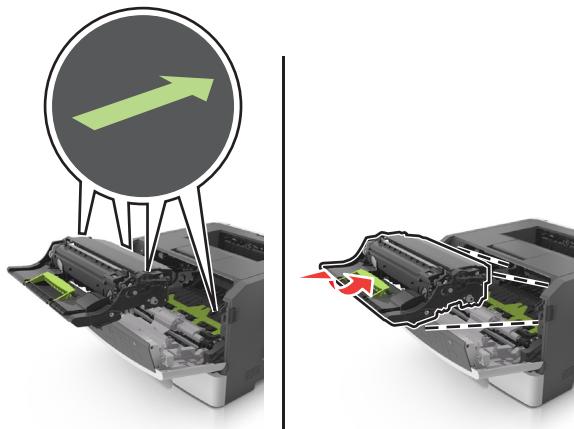


- 6 Firmly grasp the jammed paper on each side, and then gently pull it out.

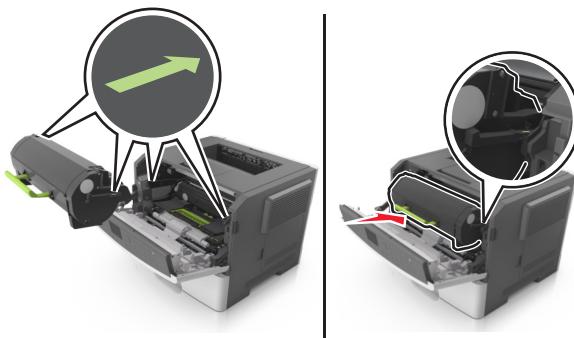
Note: Make sure all paper fragments are removed.



- 7 Insert the imaging unit by aligning the arrows on the side rails of the unit with the arrows on the side rails inside the printer, and then insert the imaging unit into the printer.



- 8 Insert the toner cartridge by aligning the side rails of the cartridge with the arrows on the side rails inside the printer, and then insert the cartridge into the printer.

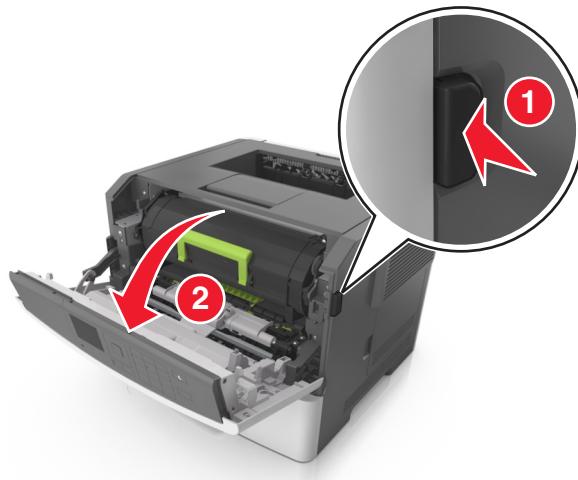


- 9 Close the front door.

- 10 From the printer control panel, touch to clear the message and continue printing. For non-touch-screen printer models, select **Next** > > **Clear the jam**, press **OK** > .

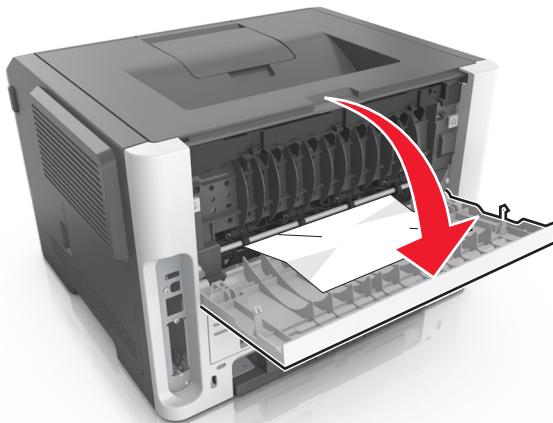
[x]-page jam, open rear door. [20y.xx]

- 1 Open the front door.



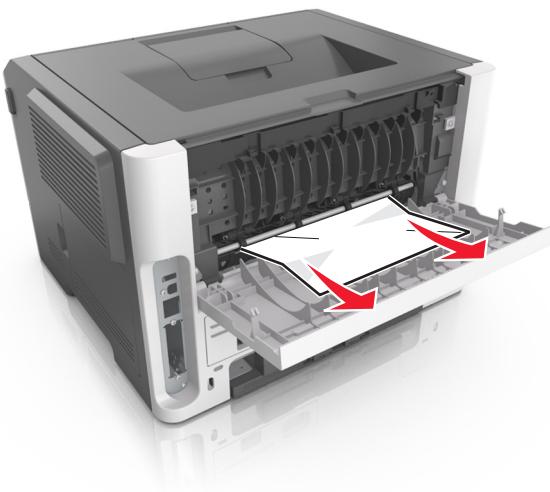
- 2 Gently pull down the rear door.

 **CAUTION—HOT SURFACE:** The inside of the printer might be hot. To reduce the risk of injury from a hot component, allow the surface to cool before touching it.



- 3 Firmly grasp the jammed paper on each side, and then gently pull it out.

Note: Make sure all paper fragments are removed.



4 Close the rear door.

5 From the printer control panel, touch to clear the message and continue printing. For non-touch-screen printer models, select **Next > OK > Clear the jam, press OK > OK**.

[x]-page jam, clear standard bin. [20y.xx]

1 Firmly grasp the jammed paper on each side, and then gently pull it out.

Note: Make sure all paper fragments are removed.

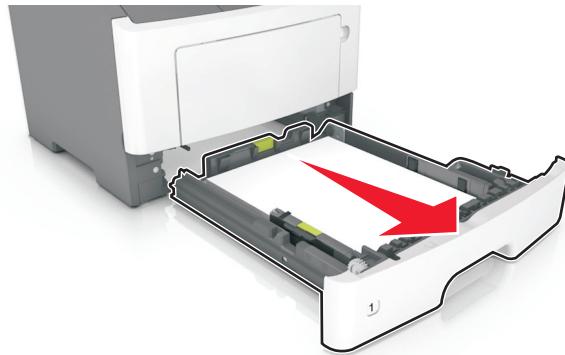


2 From the printer control panel, touch to clear the message and continue printing. For non-touch-screen printer models, select **Next > OK > Clear the jam, press OK > OK**.

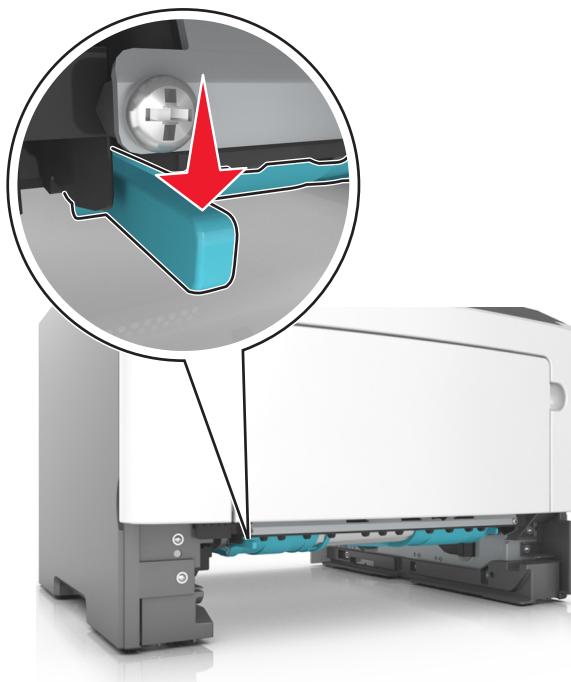
[x]-page jam, remove tray 1 to clear duplex. [23y.xx]

 **CAUTION—HOT SURFACE:** The inside of the printer might be hot. To reduce the risk of injury from a hot component, allow the surface to cool before touching it.

- 1 Pull the tray completely out of the printer.

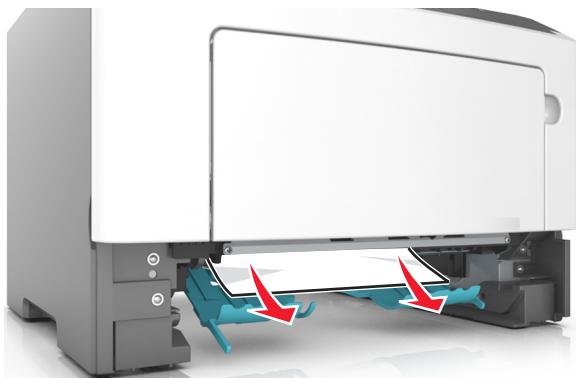


- 2 Locate the blue lever, and then pull it down to release the jam.



- 3 Firmly grasp the jammed paper on each side, and then gently pull it out.

Note: Make sure all paper fragments are removed.



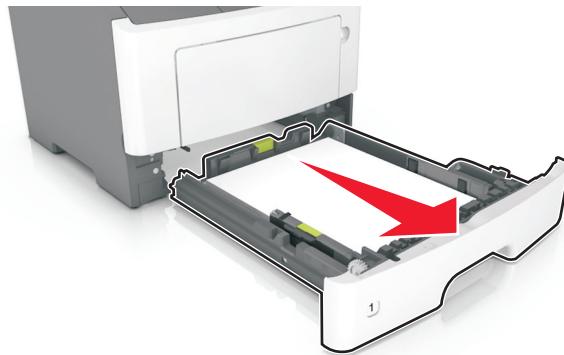
4 Insert the tray.

5 From the printer control panel, touch to clear the message and continue printing. For non-touch-screen printer models, select **Next** > > **Clear the jam, press OK** > .

[x]-page jam, open tray [x]. [24y.xx]

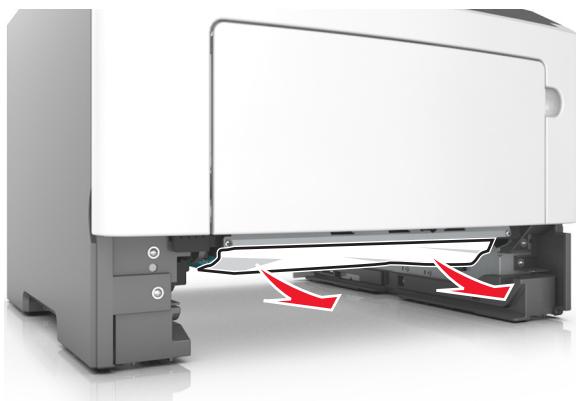
1 Pull the tray completely out of the printer.

Note: The message on the printer display indicates the tray where the jammed paper is located.



2 Firmly grasp the jammed paper on each side, and then gently pull it out.

Note: Make sure all paper fragments are removed.



3 Insert the tray.

4 From the printer control panel, touch  to clear the message and continue printing. For non-touch-screen printer models, select **Next > OK > Clear the jam, press OK > OK**.

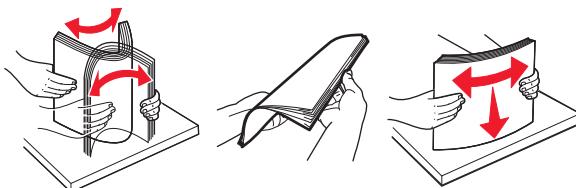
[x]-page jam, clear manual feeder. [25y.xx]

1 From the multipurpose feeder, firmly grasp the jammed paper on each side, and then gently pull it out.

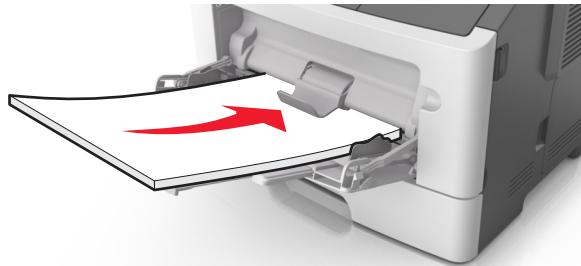
Note: Make sure all paper fragments are removed.



2 Flex the sheets of paper back and forth to loosen them, and then fan them. Do not fold or crease the paper. Straighten the edges on a level surface.



- 3 Reload paper into the multipurpose feeder.



Note: Make sure the paper guide lightly rests against the edge of the paper.

- 4 From the printer control panel, touch  to clear the message and continue printing. For non-touch-screen printer models, select **Next > OK > Clear the jam, press OK > OK**.

Troubleshooting

Understanding the printer messages

Cartridge, imaging unit mismatch [41.xy]

- 1 Check if both the toner cartridge and imaging unit are *MICR* (Magnetic Ink Character Recognition) or non-MICR supplies.
Note: For a list of supported supplies, see the “Ordering supplies” section of the *User’s Guide* or visit www.lexmark.com.
- 2 Change the toner cartridge or imaging unit so that both are MICR or non-MICR supplies.

Notes:

- Use a MICR toner cartridge and imaging unit for printing checks and other similar documents.
- Use a non-MICR toner cartridge and imaging unit for regular print jobs.

Cartridge low [88.xy]

You may need to order a toner cartridge. If necessary, select **Continue** on the printer control panel to clear the message and continue printing. For non-touch-screen printer models, press  to confirm.

Cartridge nearly low [88.xy]

If necessary, select **Continue** on the printer control panel to clear the message and continue printing. For non-touch-screen printer models, press  to confirm.

Cartridge very low, [x] estimated pages remain [88.xy]

You may need to replace the toner cartridge very soon. For more information, see the “Replacing supplies” section of the *User’s Guide*.

If necessary, select **Continue** on the printer control panel to clear the message and continue printing. For non-touch-screen printer models, press  to confirm.

Change [paper source] to [custom type name] load [orientation]

Try one or more of the following

- Load the correct paper size and type in the tray, verify the paper size and type settings are specified in the Paper menu on the printer control panel, and then select **Finished changing paper**. For non-touch-screen printer models, press  to confirm.
- Cancel the print job.

Change [paper source] to [custom string] load [paper orientation]

Try one or more of the following:

- Load the correct size and type of paper in the tray, then verify that the paper size and type settings are specified in the Paper menu on the printer control panel, and then select **Finished changing paper**. For non-touch-screen printer models, press  to confirm.
- Cancel the print job.

Change [paper source] to [paper size] load [orientation]

Try one or more of the following:

- Load the correct paper size and type in the tray, verify the paper size and type settings are specified in the Paper menu on the printer control panel, and then select **Finished changing paper**. For non-touch-screen printer models, press  to confirm.
- Cancel the print job.

Change [paper source] to [paper type] [paper size] load [orientation]

Try one or more of the following:

- Load the correct paper size and type in the tray, verify the paper size and type settings are specified in the Paper menu on the printer control panel, and then select **Finished changing paper**. For non-touch-screen printer models, press  to confirm.
- Cancel the print job.

Close front door

Close the front door of the printer.

Complex page, some data may not have printed [39]

Try one or more of the following:

- From the printer control panel, select **Continue** to ignore the message and continue printing. For non-touch-screen printer models, press  to confirm.
- Cancel the current print job. For non-touch-screen printer models, press  to confirm.
- Install additional printer memory.

Configuration change, some held jobs were not restored [57]

Held jobs are invalidated because of any of the following possible changes in the printer:

- The printer firmware has been updated.
- The tray for the print job is removed.

- The print job is sent from a flash drive that is no longer attached to the USB port.
- The printer hard disk contains print jobs that were stored when the hard disk was installed in a different printer model.

From the printer control panel, select **Continue** to clear the message. For non-touch-screen printer models, press  to confirm.

Defective flash detected [51]

Try one or more of the following:

- Replace the defective flash memory card.
- From the printer control panel, select **Continue** to ignore the message and continue printing. For non-touch-screen printer models, press  to confirm.
- Cancel the current print job.

Error reading USB drive. Remove USB.

An unsupported USB device is inserted. Remove the USB device, and then insert a supported one.

Error reading USB hub. Remove hub.

An unsupported USB hub has been inserted. Remove the USB hub, and then install a supported one.

Imaging unit low [84.xy]

You may need to order an imaging unit. If necessary, select **Continue** on the printer control panel to clear the message and continue printing. For non-touch-screen printer models, press  to confirm.

Imaging unit nearly low [84.xy]

If necessary, select **Continue** on the printer control panel to clear the message and continue printing. For non-touch-screen printer models, press  to confirm.

Imaging unit very low, [x] estimated pages remain [84.xy]

You may need to replace the imaging unit very soon. For more information, see the "Replacing supplies" section of the *User's Guide*.

If necessary, select **Continue** on the printer control panel to clear the message and continue printing. For non-touch-screen printer models, press  to confirm.

Incorrect paper size, open [paper source] [34]

Note: The paper source can be a tray or a feeder.

Try one or more of the following:

- Load the correct size of paper in the paper source.
- From the printer control panel, select **Continue** to clear the message and print using a different paper source. For non-touch-screen printer models, press **OK** to confirm.
- Check the length and width guides of the paper source and make sure the paper is loaded properly.
- Make sure the correct paper size and type are specified in the Printing Preferences or in the Print dialog.
- Make sure the paper size and type are specified in the Paper menu on the printer control panel.
- Make sure that the paper size is correctly set. For example, if Multipurpose Feeder Size is set to Universal, then make sure the paper is large enough for the data being printed.
- Cancel the print job.

Insert Tray [x]

Insert the indicated tray into the printer.

Insufficient memory to support Resource Save feature [35]

Install additional printer memory or select **Continue** on the printer control panel to disable Resource Save, clear the message, and continue printing. For non-touch-screen printer models, press **OK** to confirm.

Insufficient memory to collate job [37]

Try one or more of the following:

- From the printer control panel, select **Continue** to print the part of the job already stored and begin collating the rest of the print job. For non-touch-screen printer models, press **OK** to confirm.
- Cancel the current print job.

Insufficient memory for Flash Memory Defragmentation operation [37]

Try one or more of the following:

- From the printer control panel, select **Continue** to stop the defragmentation and continue printing. For non-touch-screen printer models, press **OK** to confirm.
- Delete fonts, macros, and other data from the printer memory.
- Install additional printer memory.

Insufficient memory, some Held Jobs were deleted [37]

The printer deleted some held jobs in order to process current jobs.

Select **Continue** to clear the message. For non-touch-screen printer models, press  to confirm.

Insufficient memory, some held jobs will not be restored [37]

Try one or more of the following:

- From the printer control panel, select **Continue** to clear the message. For non-touch-screen printer models, press  to confirm.
- Delete other held jobs to free up additional printer memory.

Load [paper source] with [custom string] [paper orientation]

Try one or more of the following:

- Load the tray or feeder with the correct size and type of paper.
- To use the tray that has the correct size or type of paper, select **Finished loading paper** on the printer control panel.
For non-touch-screen printer models, press  to confirm.
Note: If the printer finds a tray that has the correct size and type of paper, then it feeds from that tray. If the printer cannot find a tray that has the correct size and type of paper, then it prints from the default paper source.
- Cancel the current job.

Load [paper source] with [custom type name] [paper orientation]

Try one or more of the following:

- Load the tray or feeder with the correct size and type of paper.
- To use the tray that has the correct size or type of paper, select **Finished loading paper** on the printer control panel.
For non-touch-screen printer models, press  to confirm.
Note: If the printer finds a tray that has the correct size and type of paper, then it feeds from that tray. If the printer cannot find a tray that has the correct size and type of paper, then it prints from the default paper source.
- Cancel the current job.

Load [paper source] with [paper size] [paper orientation]

Try one or more of the following:

- Load the tray or feeder with the correct size of paper.
- To use the tray or feeder that has the correct size of paper, select **Finished loading paper** on the printer control panel. For non-touch-screen printer models, press  to confirm.
Note: If the printer finds a tray that has the correct size and type of paper, then it feeds from that tray. If the printer cannot find a tray that has the correct size and type of paper, then it prints from the default paper source.
- Cancel the current job.

Load [paper source] with [paper type] [paper size] [paper orientation]

Try one or more of the following:

- Load the tray or feeder with the correct size and type of paper.
- To use the tray or feeder that has the correct size and type of paper, select **Finished loading paper** on the printer control panel. For non-touch-screen printer models, press **OK** to confirm.
Note: If the printer finds a tray that has the correct size and type of paper, then it feeds from that tray. If the printer cannot find a tray that has the correct size and type of paper, then it prints from the default paper source.
- Cancel the current job.

Load manual feeder with [custom type name] [paper orientation]

Try one or more of the following:

- Load the multipurpose feeder with the correct size and type of paper.
- Depending on your printer model, touch **Continue** or press **OK** to clear the message and continue printing.
Note: If no paper is loaded in the feeder when **Continue** or **OK** is selected, then the printer manually overrides the request, and then prints from an automatically selected tray.
- Cancel the current job.

Load manual feeder with [custom string] [paper orientation]

Try one or more of the following:

- Load the feeder with the correct size and type of paper.
- Depending on your printer model, touch **Continue** or press **OK** to clear the message and continue printing.
Note: If no paper is loaded in the feeder when **Continue** or **OK** is selected, then the printer automatically overrides the request, and then prints from an automatically selected tray.
- Cancel the current job.

Load manual feeder with [paper size] [paper orientation]

Try one or more of the following:

- Load the multipurpose feeder with the correct size of paper.
- Depending on your printer model, touch **Continue** or press **OK** to clear the message and continue printing.
Note: If no paper is loaded in the feeder when **Continue** or **OK** is selected, then the printer manually overrides the request, and then prints from an automatically selected tray.
- Cancel the current job.

Load manual feeder with [paper type] [paper size] [paper orientation]

Try one or more of the following:

- Load the multipurpose feeder with the correct size and type of paper.
- Depending on your printer model, touch **Continue** or press  to clear the message and continue printing.
Note: If no paper is loaded in the feeder when **Continue** or  is selected, then the printer manually overrides the request, and then prints from an automatically selected tray.
- Cancel the current job.

Maintenance kit low [80.xy]

You may need to order a maintenance kit. For more information, visit the Lexmark support Web site at <http://support.lexmark.com> or contact customer support, and then report the message.

If necessary, select **Continue** to clear the message and continue printing. For non-touch-screen printer models, press  to confirm.

Maintenance kit nearly low [80.xy]

For more information, visit the Lexmark support Web site at <http://support.lexmark.com> or contact customer support, and then report the message.

If necessary, select **Continue** to clear the message and continue printing. For non-touch-screen printer models, press  to confirm.

Maintenance kit very low, [x] estimated pages remain [80.xy]

You may need to replace the maintenance kit very soon. For more information, visit the Lexmark support Web site at <http://support.lexmark.com> or contact customer support, and then report the message.

If necessary, select **Continue** on the printer control panel to clear the message and continue printing. For non-touch-screen printer models, press  to confirm.

Memory full [38]

Try one or more of the following:

- From the printer control panel, select **Cancel job** to clear the message. For non-touch-screen printer models, press  to confirm.
- Install additional printer memory.

Network [x] software error [54]

Try one or more of the following:

- From the printer control panel, select **Continue** to continue printing. For non-touch-screen printer models, press  to confirm.
- Turn off the printer, wait for about 10 seconds, and then turn the printer back on.
- Update the network firmware in the printer or print server. For more information, visit the Lexmark support Web site at <http://support.lexmark.com>.

Non-Lexmark [supply type], see User's Guide [33.xy]

Note: The supply type can be toner cartridge or imaging unit.

The printer has detected a non-Lexmark supply or part installed in the printer.

Your Lexmark printer is designed to function best with genuine Lexmark supplies and parts. Use of third-party supplies or parts may affect the performance, reliability, or life of the printer and its imaging components.

All life indicators are designed to function with Lexmark supplies and parts and may deliver unpredictable results if third-party supplies or parts are used. Imaging component usage beyond the intended life may damage your Lexmark printer or associated components.

Warning—Potential Damage: Use of third-party supplies or parts can affect warranty coverage. Damage caused by the use of third-party supplies or parts may not be covered by the warranty.

To accept any and all of these risks and to proceed with the use of non-genuine supplies or parts in your printer, press and hold  and the # button on the printer control panel simultaneously for 15 seconds.

For non-touch-screen printer models, press  and  on the printer control panel simultaneously for 15 seconds to clear the message and continue printing.

If you do not wish to accept these risks, then remove the third-party supply or part from your printer, and then install a genuine Lexmark supply or part.

Note: For a list of supported supplies, see the “Ordering supplies” section of the *User's Guide* or visit www.lexmark.com.

Not enough free space in flash memory for resources [52]

Try one or more of the following:

- From the printer control panel, select **Continue** to clear the message and continue printing. For non-touch-screen printer models, press  to confirm.
- Delete fonts, macros, and other data stored in the flash memory.
- Upgrade to a larger capacity flash memory card.

Note: Downloaded fonts and macros that are not previously stored in the flash memory are deleted.

Printer had to restart. Last job may be incomplete.

From the printer control panel, touch  to clear the message and continue printing. For non-touch-screen printer models, press  to confirm.

For more information, visit <http://support.lexmark.com> or contact customer support.

Reinstall missing or unresponsive cartridge [31.xy]

Try one or more of the following:

- Check if the toner cartridge is missing. If missing, install the toner cartridge.
For information on installing the cartridge, see the “Replacing supplies” section of the *User’s Guide*.
- If the toner cartridge is installed, then remove the unresponsive toner cartridge, and then reinstall it.

Note: If the message appears after reinstalling the supply, then the cartridge is defective. Replace the toner cartridge.

Reinstall missing or unresponsive imaging unit [31.xy]

Try one or more of the following:

- Check if the imaging unit is missing. If missing, install the imaging unit.
For information on installing the imaging unit, see the “Replacing supplies” section of the *User’s Guide*.
- If the imaging unit is installed, then remove the unresponsive imaging unit, and then reinstall it.

Note: If the message appears after reinstalling the supply, then the imaging unit is defective. Replace the imaging unit.

Remove paper from standard output bin

Remove the paper stack from the standard bin. The printer automatically detects paper removal and resumes printing.

If removing the paper does not clear the message, then select **Continue** on the printer control panel. For non-touch-screen printer models, press  to confirm.

Replace cartridge, 0 estimated pages remain [88.xy]

Replace the toner cartridge to clear the message and continue printing. For more information, see the instruction sheet that came with the supply or see the “Replacing supplies” section of the *User’s Guide*.

Note: If you do not have a replacement cartridge, then see the “Ordering supplies” section of the *User’s Guide* or visit www.lexmark.com.

Replace cartridge, printer region mismatch [42.xy]

Install a toner cartridge that matches the region number of the printer. x indicates the value of the printer region. y indicates the value of the cartridge region. x and y can have the following values:

List of printer and toner cartridge regions

Region number	Region
0	Global
1	United States, Canada
2	European Economic Area (EEA), Switzerland
3	Asia Pacific, Australia, New Zealand
4	Latin America
5	Africa, Middle East, rest of Europe
9	Invalid

Notes:

- The x and y values are the .xy of the error code shown on the printer control panel.
- The x and y values must match for printing to continue.

Replace imaging unit, 0 estimated pages remain [84.xy]

Replace the imaging unit to clear the message and continue printing. For more information, see the instruction sheet that came with the supply or see the “Replacing supplies” section of the *User’s Guide*.

Note: If you do not have a replacement imaging unit, then see the “Ordering supplies” section of the *User’s Guide* or visit www.lexmark.com.

Replace maintenance kit, 0 estimated pages remain [80.xy]

The printer is scheduled for maintenance. For more information, visit the Lexmark support Web site at <http://support.lexmark.com> or contact your service representative, and then report the message.

Replace unsupported cartridge [32.xy]

Remove the toner cartridge, and then install a supported one to clear the message and continue printing. For more information, see the instruction sheet that came with the supply or see the “Replacing supplies” section of the *User’s Guide*.

Note: If you do not have a replacement cartridge, then see the “Ordering supplies” section of the *User’s Guide* or visit www.lexmark.com.

Replace unsupported imaging unit [32.xy]

Remove the imaging unit, and then install a supported one to clear the message and continue printing. For more information, see the instruction sheet that came with the supply or see the “Replacing supplies” section of the *User’s Guide*.

Note: If you do not have a replacement imaging unit, then see the “Ordering supplies” section of the *User’s Guide* or visit www.lexmark.com.

Serial option [x] error [54]

Try one or more of the following:

- Make sure that the serial cable is properly connected and is the correct one for the serial port.
- Make sure that the serial interface parameters (protocol, baud, parity, and data bits) are set correctly on the printer and computer.
- From the printer control panel, select **Continue** to continue printing. For non-touch-screen printer models, press **OK** to confirm.
- Turn off the printer, and then turn it back on.

SMTP server not set up. Contact system administrator.

From the printer control panel, select **Continue** to clear the message. For non-touch-screen printer models, press **OK** to confirm.

Note: If the message appears again, then contact your system support person.

Standard network software error [54]

Try one or more of the following:

- From the printer control panel, select **Continue** to continue printing. For non-touch-screen printer models, press **OK** to confirm.
- Turn off the printer and then turn it back on.
- Update the network firmware in the printer or print server. For more information, visit the Lexmark support Web site at <http://support.lexmark.com>.

Standard parallel port disabled [56]

- From the printer control panel, select **Continue** to clear the message. For non-touch-screen printer models, press **OK** to confirm.

Notes:

- The printer discards any data received through the parallel port.
- Make sure the Parallel Buffer menu is not set to Disabled.

Standard USB port disabled [56]

From the printer control panel, select **Continue** to clear the message. For non-touch-screen printer models, press **OK** to confirm.

Notes:

- The printer discards any data received through the USB port.
- Make sure the USB Buffer menu is not set to Disabled.

Too many flash options installed [58]

- 1 Turn off the printer.
- 2 Unplug the power cord from the electrical outlet.
- 3 Remove the extra flash memory.
- 4 Connect the power cord to a properly grounded electrical outlet.
- 5 Turn the printer back on.

Too many trays attached [58]

- 1 Turn off the printer.
- 2 Unplug the power cord from the electrical outlet.
- 3 Remove the extra trays.
- 4 Connect the power cord to a properly grounded electrical outlet.
- 5 Turn the printer back on.

Unformatted flash detected [53]

Try one or more of the following:

- From the printer control, select **Continue** to stop the defragmentation and continue printing. For non-touch-screen printer models, press  to confirm.
- Format the flash memory.

Note: If the error message remains, then the flash memory may be defective and need to be replaced.

Unsupported option in slot [x] [55]

- 1 Turn off the printer.
- 2 Unplug the power cord from the electrical outlet.
- 3 Remove the unsupported option card from the printer controller board, and then replace it with a supported card.
- 4 Connect the power cord to a properly grounded electrical outlet.
- 5 Turn the printer back on.

Weblink server not set up. Contact system administrator.

Select **Continue** to clear the message. For non-touch-screen printer models, press  to confirm.

Note: If the message appears again, then contact your system support person.

Solving printer problems

- “Basic printer problems” on page 205
- “Option problems” on page 207
- “Paper feed problems” on page 210

Basic printer problems

The printer is not responding

Action	Yes	No
Step 1 Make sure the printer is turned on. Is the printer turned on?	Go to step 2.	Turn on the printer.
Step 2 Check if the printer is in Sleep mode or Hibernate mode. Is the printer in Sleep mode or Hibernate mode?	Press the Sleep button to wake the printer from Sleep mode or Hibernate mode.	Go to step 3.
Step 3 Check if one end of the power cord is plugged into the printer and the other to a properly grounded electrical outlet. Is the power cord plugged into the printer and a properly grounded electrical outlet?	Go to step 4.	Plug one end of the power cord into the printer and the other to a properly grounded electrical outlet.
Step 4 Check other electrical equipment plugged into the electrical outlet. Does other electrical equipment work?	Unplug the other electrical equipment, and then turn on the printer. If the printer does not work, then reconnect the other electrical equipment.	Go to step 5.
Step 5 Check if the cables connecting the printer and the computer are inserted in the correct ports. Are the cables inserted in the correct ports?	Go to step 6.	Make sure to match the following: <ul style="list-style-type: none">• The USB symbol on the cable with the USB symbol on the printer• The appropriate Ethernet cable with the Ethernet port
Step 6 Make sure the electrical outlet is not turned off by a switch or breaker. Is the electrical outlet turned off by a switch or breaker?	Turn on the switch or reset the breaker.	Go to step 7.

Action	Yes	No
Step 7 Check if the printer is plugged into any surge protectors, uninterruptible power supplies, or extension cords. Is the printer plugged into any surge protectors, uninterruptible power supplies, or extension cords?	Connect the printer power cord directly to a properly grounded electrical outlet.	Go to step 8.
Step 8 Check if one end of the printer cable is plugged into a port on the printer and the other to the computer, print server, option, or other network device. Is the printer cable securely attached to the printer and the computer, print server, option, or other network device?	Go to step 9.	Connect the printer cable securely to the printer and the computer, print server, option, or other network device.
Step 9 Make sure to install all hardware options properly and remove any packing material. Are all hardware options properly installed and all packing material removed?	Go to step 10.	Turn off the printer, remove all packing materials, then reinstall the hardware options, and then turn on the printer.
Step 10 Check if you have selected the correct port settings in the printer driver. Are the port settings correct?	Go to step 11.	Use correct printer driver settings.
Step 11 Check the installed printer driver. Is the correct printer driver installed?	Go to step 12.	Install the correct printer driver.
Step 12 Turn off the printer, then wait for about 10 seconds, and then turn the printer back on. Is the printer working?	The problem is solved.	Contact customer support .

Printer display is blank

Action	Yes	No
Step 1 Press the Sleep button on the printer control panel. Does Ready appear on the printer display?	The problem is solved.	Go to step 2.
Step 2 Turn off the printer, then wait for about 10 seconds, and then turn the printer back on. Do Please wait and Ready appear on the printer display?	The problem is solved.	Turn off the printer, and then contact customer support .

Option problems

Cannot detect internal option

Action	Yes	No
Step 1 Turn off the printer, then wait for about 10 seconds, and then turn on the printer. Does the internal option operate correctly?	The problem is solved.	Go to step 2.
Step 2 Check if the internal option is properly installed in the controller board. a Turn off the printer using the power switch, and then unplug the power cord from the electrical outlet. b Make sure the internal option is installed in the appropriate connector in the controller board. c Connect the power cord to the printer, then to a properly grounded electrical outlet, and then turn on the printer. Is the internal option properly installed in the controller board?	Go to step 3.	Connect the internal option to the controller board.
Step 3 Print a menu settings page, and then check to see if the internal option is listed in the Installed Features list. Is the internal option listed in the menu settings page?	Go to step 4.	Reinstall the internal option.

Action	Yes	No
<p>Step 4</p> <p>a Check if the internal option is selected.</p> <p>It may be necessary to manually add the internal option in the printer driver to make it available for print jobs. For more information, see “Updating available options in the printer driver” on page 29.</p> <p>b Resend the print job.</p> <p>Does the internal option operate correctly?</p>	The problem is solved.	Contact customer support .

Tray problems

Action	Yes	No
<p>Step 1</p> <p>a Open the tray and do one or more of the following:</p> <ul style="list-style-type: none"> • Check for paper jams or misfeeds. • Check if the paper size indicators on the paper guides are aligned with the paper size indicators on the tray. • If you are printing on custom-size paper, then make sure that the paper guides rest against the edges of the paper. • Make sure the paper is below the maximum paper fill indicator. • Make sure paper lies flat in the tray. <p>b Check if the tray closes properly.</p> <p>Is the tray working?</p>	The problem is solved.	Go to step 2.
<p>Step 2</p> <p>a Turn off the printer, then wait about 10 seconds, and then turn the printer back on.</p> <p>b Resend the print job.</p> <p>Is the tray working?</p>	The problem is solved.	Go to step 3.
<p>Step 3</p> <p>Check if the tray is installed.</p> <p>Print a menu settings page, and then check if the tray is listed in the Installed Options list.</p> <p>Is the tray listed in the menu settings page?</p>	Go to step 4.	Reinstall the tray. For more information, see the setup documentation that came with the tray.
<p>Step 4</p> <p>Check if the tray is available in the printer driver.</p> <p>Note: If necessary, manually add the tray in the printer driver to make it available for print jobs. For more information, see “Updating available options in the printer driver” on page 29.</p> <p>Is the tray available in the printer driver?</p>	Go to step 5.	Manually add the tray in the printer driver.

Action	Yes	No
<p>Step 5</p> <p>Check if the option is selected.</p> <p>a From the application you are using, select the option. For Mac OS X version 9 users, make sure the printer is set up in Chooser.</p> <p>b Resend the print job.</p> <p>Is the tray working?</p>	The problem is solved.	Contact customer support .

Internal Solutions Port does not operate correctly

Action	Yes	No
<p>Step 1</p> <p>Make sure the Internal Solutions Port (ISP) is installed.</p> <p>a Install the ISP. For more information, see “Installing an Internal Solutions Port” on page 16.</p> <p>b Print a menu settings page, and then check if the ISP is listed in the Installed Options list.</p> <p>Is the ISP listed in the Installed Options list?</p>	Go to step 2.	<p>Check if you have a supported ISP.</p> <p>Note: An ISP from another printer may not work on this printer.</p>
<p>Step 2</p> <p>Check the cable and the ISP connection.</p> <p>a Use the correct cable, and then make sure it is securely connected to the ISP.</p> <p>b Check if the ISP solution interface cable is securely connected into the receptacle of the controller board.</p> <p>Note: The ISP solution interface cable and the receptacle on the controller board are color-coded.</p> <p>Does the Internal Solutions Port operate correctly?</p>	The problem is solved.	Contact customer support .

USB/parallel interface card does not operate correctly

Action	Yes	No
<p>Step 1</p> <p>Make sure the USB or parallel interface card is installed.</p> <p>a Install the USB or parallel interface card. For more information, see “Installing an Internal Solutions Port” on page 16.</p> <p>b Print a menu settings page, and then check if the USB or parallel interface card is listed in the Installed Options list.</p> <p>Is the USB or parallel interface card listed in the Installed Options list?</p>	Go to step 2.	<p>Check if you have a supported USB or parallel interface card.</p> <p>Note: A USB or parallel interface card from another printer may not work on this printer.</p>

Action	Yes	No
<p>Step 2</p> <p>Check if you are using the correct cable and if it is connected securely to the USB or parallel interface card.</p> <p>Is the correct cable securely connected to the USB or parallel interface card?</p>	Contact customer support .	Connect the cable to the USB or parallel interface card connector.

Paper feed problems

Paper frequently jams

Action	Yes	No
<p>Step 1</p> <p>a Pull out the tray, and then do one or more of the following:</p> <ul style="list-style-type: none"> • Make sure paper lies flat in the tray. • Check if the paper size indicators on the paper guides are aligned with the paper size indicators on the tray. • Check if the paper guides are aligned against the edges of the paper. • Make sure the paper is below the maximum paper fill indicator. • Check if you are printing on a recommended paper size and type. <p>b Insert the tray properly.</p> <p>If jam recovery is enabled, then the print jobs will reprint automatically.</p> <p>Do paper jams still occur frequently?</p>	Go to step 2.	The problem is solved.
<p>Step 2</p> <p>a Load paper from a fresh package.</p> <p>Note: Paper absorbs moisture due to high humidity. Store paper in its original wrapper until you use it.</p> <p>b Resend the print job.</p> <p>Do paper jams still occur frequently?</p>	Go to step 3.	The problem is solved.
<p>Step 3</p> <p>a Review the tips on avoiding jams. For more information, see “Avoiding jams” on page 181.</p> <p>b Follow the recommendations, and then resend the print job.</p> <p>Do paper jams still occur frequently?</p>	Contact customer support .	The problem is solved.

Paper jam message remains after jam is cleared

Action	Yes	No
<p>a Do either of the following:</p> <ul style="list-style-type: none"> For touch-screen printer models, touch or Done. For non-touch-screen printer models, select Next > OK > Clear the jam, press OK > OK. <p>b Follow the instructions on the printer display.</p> <p>Does the paper jam message remain?</p>	Contact customer support .	The problem is solved.

Jammed pages are not reprinted

Action	Yes	No
<p>a Turn on jam recovery.</p> <ol style="list-style-type: none"> From the printer control panel, navigate to: Settings > General Settings > Print Recovery > Jam Recovery Select On or Auto. Depending on your printer model, press or touch Submit. <p>b Resend the pages that did not print.</p> <p>Were the jammed pages reprinted?</p>	The problem is solved. Contact customer support .	

Solving print problems

Printing problems

Multiple-language PDF files do not print

Action	Yes	No
Step 1		
<p>a Check if the print options for the PDF output are set to embed all fonts.</p> <p>b Generate a new PDF file, and then resend the print job.</p> <p>Do the files print?</p>	The problem is solved. Go to step 2.	
Step 2		
<p>a Open the document you want to print in Adobe Acrobat.</p> <p>b Click File > Print > Advanced > Print As Image > OK > OK.</p> <p>Do the files print?</p>	The problem is solved. Contact customer support .	

Error message about reading the flash drive appears

Action	Yes	No
Step 1 Check if the flash drive is inserted into the front USB slot. Note: The flash drive will not work if it is inserted into the rear USB slot. Is the flash drive inserted into the front USB slot?	Go to step 2.	Insert the flash drive into the front USB slot.
Step 2 Check if the printer is busy. Note: A green blinking light indicates that the printer is busy. Is there an error message on the display?	Wait until the printer is ready, then view the held jobs list, and then print the documents.	Go to step 3.
Step 3 Check for an error message on the display. Note: A blinking red light indicates a printer error. Since the printer requires attention, the printer ignores the flash drive. Does the printer require attention?	Clear the message.	Go to step 4.
Step 4 Check if the flash drive is supported. For more information regarding tested and approved USB flash memory devices, see "Supported flash drives and file types" on page 94. Is the flash drive supported?	Go to step 5.	Use a supported flash drive.
Step 5 Check if the USB slot is disabled by the system support person. Is the USB slot disabled?	Contact your system support person.	Contact customer support .

Print jobs do not print

Action	Yes	No
Step 1 <ol style="list-style-type: none"> From the document you are trying to print, open the Print dialog and check if you have selected the correct printer. Note: If the printer is not the default printer, then you must select the printer for each document that you want to print. Resend the print job. Do the jobs print?	The problem is solved.	Go to step 2.

Action	Yes	No
Step 2 a Check if the printer is plugged in and turned on, and if Ready appears on the printer display. b Resend the print job. Do the jobs print?	The problem is solved.	Go to step 3.
Step 3 If an error message appears on the printer display, then clear the message. Note: The printer continues to print after clearing the message. Do the jobs print?	The problem is solved.	Go to step 4.
Step 4 a Check if the ports (USB, serial, or Ethernet) are working and if the cables are securely connected to the computer and the printer. Note: For more information, see the setup documentation that came with the printer. b Resend the print job. Do the jobs print?	The problem is solved.	Go to step 5.
Step 5 a Turn off the printer, then wait for about 10 seconds, and then turn the printer back on. b Resend the print job. Do the jobs print?	The problem is solved.	Go to step 6.
Step 6 a Remove, and then reinstall the printer software. For more information, see “Installing the printer software” on page 28. Note: The printer software is available at http://support.lexmark.com . b Resend the print job. Do the jobs print?	The problem is solved.	Contact customer support .

Confidential and other held jobs do not print

Note: Confidential, Verify, Reserve, and Repeat print jobs may be deleted if the printer requires extra memory to process additional held jobs.

Action	Yes	No
Step 1 Open the held jobs folder on the printer display, and then verify that your print job is listed. Is your print job listed in the held jobs folder?	Go to step 2.	Select one of the Print and Hold options, and then resend the print job. For more information, see "Printing confidential and other held jobs" on page 95.
Step 2 The print job may contain a formatting error or invalid data. <ul style="list-style-type: none">• Delete the print job, and then send it again.• For PDF files, generate a new PDF, and then print it again. If you are printing from the Internet, then the printer may be reading multiple job titles as duplicates and deleting all jobs except the first one. For Windows users <ol style="list-style-type: none">a Open the Print Properties folder.b From the Print and Hold dialog, select the "Keep duplicate documents" check box.c Enter a PIN number. For Macintosh users Save each print job, name each job differently, and then send the individual jobs to the printer. Does the job print?	The problem is solved. Go to step 3.	
Step 3 Free up additional printer memory by deleting some of the held jobs. Does the job print?	The problem is solved.	Add additional printer memory.

Print job takes longer than expected

Action	Yes	No
Step 1 Change the environmental settings of the printer. a From the printer control panel, navigate to: Settings > General Settings b Select Eco-Mode or Quiet Mode , and then select Off . Note: Disabling Eco-Mode or Quiet Mode may increase the consumption of energy or supplies, or both.	The problem is solved.	Go to step 2.
Did the job print?		
Step 2 Reduce the number and size of fonts, the number and complexity of images, and the number of pages in the print job, and then resend the job	The problem is solved.	Go to step 3.
Did the job print?		
Step 3 a Remove held jobs stored in the printer memory. b Resend the print job.	The problem is solved.	Go to step 4.
Did the job print?		
Step 4 a Disable the Page Protect feature. From the printer control panel, navigate to: Settings > General Settings > Print Recovery > Page Protect > Off b Resend the print job.	The problem is solved.	Go to step 5.
Did the job print?		
Step 5 Install additional printer memory, and then resend the print job.	The problem is solved.	Contact customer support .
Did the job print?		

Job prints from the wrong tray or on the wrong paper

Action	Yes	No
Step 1 a Check if you are printing on paper that is supported by the tray. b Resend the print job.	The problem is solved.	Go to step 2.
Did the job print from the correct tray or on the correct paper?		

Action	Yes	No
Step 2 a From the Paper menu on the printer control panel, set the paper size and type to match the paper loaded in the tray. b Resend the print job.	The problem is solved.	Go to step 3.
Did the job print from the correct tray or on the correct paper?		
Step 3 a Depending on your operating system, open Printing Preferences or the Print dialog, and then specify the paper type. b Resend the print job.	The problem is solved.	Go to step 4.
Did the job print from the correct tray or on the correct paper?		
Step 4 a Check if the trays are not linked. b Resend the print job.	The problem is solved.	Contact customer support .
Did the job print from the correct tray or on the correct paper?		

Incorrect characters print

Action	Yes	No
Step 1 Make sure the printer is not in Hex Trace mode. Note: If Ready Hex appears on the printer display, then turn off the printer, and then turn it back on to deactivate Hex Trace mode.	Deactivate Hex Trace mode.	Go to step 2.
Is the printer in Hex Trace mode?		
Step 2 a From the printer control panel, select Standard Network or Network [x] , and then set SmartSwitch to On. b Resend the print job.	Contact customer support .	The problem is solved.
Do incorrect characters print?		

Tray linking does not work

Note: The trays and the multipurpose feeder do not automatically detect the paper size. You must set the size from the Paper Size/Type menu.

Action	Yes	No
<p>a From the printer control panel, set the paper size and type in the Paper menu to match the paper loaded in the trays to be linked.</p> <p>Note: The paper size and type must match for trays to be linked.</p> <p>b Resend the print job.</p>	The problem is solved.	Contact customer support .
Do the trays link correctly?		

Large jobs do not collate

Action	Yes	No
<p>Step 1</p> <p>a From the Finishing menu on the printer control panel, set Collate to (1,2,3) (1,2,3).</p> <p>b Resend the print job.</p>	The problem is solved.	Go to step 2.
Did the job print and collate correctly?		
<p>Step 2</p> <p>a From the printer software, set Collate to (1,2,3) (1,2,3).</p> <p>Note: Setting Collate to (1,1,1) (2,2,2) in the software overrides the setting in the Finishing menu.</p> <p>b Resend the print job.</p>	The problem is solved.	Go to step 3.
Did the job print and collate correctly?		
<p>Step 3</p> <p>Reduce the complexity of the print job by eliminating the number and size of fonts, the number and complexity of images, and the number of pages in the job.</p>	The problem is solved.	Contact customer support .
Did the job print and collate correctly?		

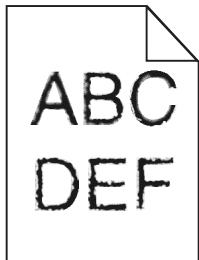
Unexpected page breaks occur

Action	Yes	No
<p>Step 1</p> <p>Adjust the print timeout settings.</p> <p>a From the printer control panel, navigate to: Settings > General Settings > Timeouts > Print Timeout</p> <p>b Select a higher setting and then, depending on your printer model, select OK or Submit.</p> <p>c Resend the print job.</p>	The problem is solved.	Go to step 2.
Did the file print correctly?		

Action	Yes	No
Step 2 <ul style="list-style-type: none"> a Check the original file for manual page breaks. b Resend the print job. 	The problem is solved.	Contact customer support .
Did the file print correctly?		

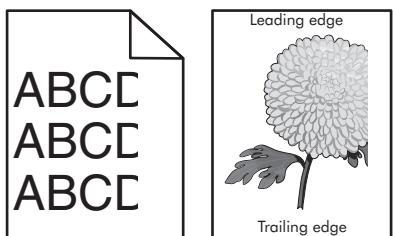
Print quality problems

Characters have jagged or uneven edges



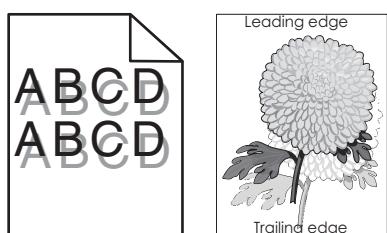
Action	Yes	No
Step 1 <ul style="list-style-type: none"> a Print a font sample list to check if the fonts you are using are supported by the printer. <ol style="list-style-type: none"> 1 From the printer control panel, navigate to: Menus > Reports > Print Fonts 2 Select PCL Fonts or PostScript Fonts. b Resend the print job. 	Go to step 2.	Select a font that is supported by the printer.
Are you using fonts that are supported by the printer?		
Step 2 <p>Check if the fonts installed on the computer are supported by the printer.</p>	The problem is solved.	Contact customer support .
Are the fonts installed on the computer supported by the printer?		

Clipped pages or images



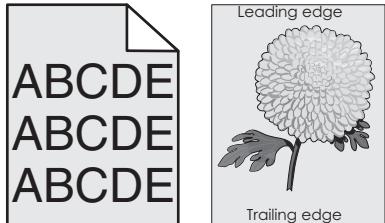
Action	Yes	No
Step 1 <p>a Move the width and length guides in the tray to the correct positions for the paper loaded.</p> <p>b Resend the print job.</p> <p>Is the page or image clipped?</p>	Go to step 2.	The problem is solved.
Step 2 <p>From the printer control panel, set the paper size and type in the Paper menu to match the paper loaded in the tray.</p> <p>Do the paper size and type match the paper loaded in the tray?</p>	Go to step 3.	Do one or more of the following: <ul style="list-style-type: none"> Specify the paper size from the tray settings to match the paper loaded in the tray. Change the paper loaded in the tray to match the paper size specified in the tray settings.
Step 3 <p>a Depending on your operating system, specify the paper size from Printing Preferences or from the Print dialog.</p> <p>b Resend the print job.</p> <p>Is the page or image clipped?</p>	Go to step 4.	The problem is solved.
Step 4 <p>a Reinstall the imaging unit.</p> <ol style="list-style-type: none"> Remove the toner cartridge. Remove the imaging unit. <p>Warning—Potential Damage: Do not expose the imaging unit to direct light for more than 10 minutes. Extended exposure to light may cause print quality problems.</p> <ol style="list-style-type: none"> Install the imaging unit, and then the cartridge. <p>b Resend the print job.</p> <p>Is the page or image clipped?</p>	Contact customer support .	The problem is solved.

Shadow images appear on prints



Action	Yes	No
Step 1 Load paper with the correct paper type and weight in the tray. Is paper with the correct paper type and weight loaded in the tray?	Go to step 2.	Load paper with the correct paper type and weight in the tray.
Step 2 From the printer control panel, set the paper type and weight in the Paper menu to match the paper loaded in the tray. Is the tray set to the type and weight of the paper loaded?	Go to step 3.	Change the paper loaded in the tray to match the paper type and weight specified in the tray settings.
Step 3 <ul style="list-style-type: none">a Depending on your operating system, specify the paper type and weight from Printing Preferences or from the Print dialog.b Resend the print job. Do shadow images still appear on prints?	Go to step 4.	The problem is solved.
Step 4 Replace the imaging unit, and then resend the print job. Do shadow images still appear on prints?	Contact customer support .	The problem is solved.

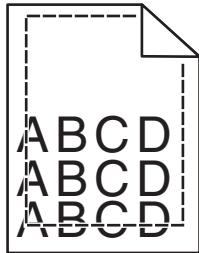
Gray background on prints



Action	Yes	No
Step 1 <ul style="list-style-type: none">a From the Quality Menu on the printer control panel, decrease the toner darkness. Note: 8 is the factory default setting.b Resend the print job. Did the gray background disappear from the prints?	The problem is solved.	Go to step 2.

Action	Yes	No
<p>Step 2</p> <p>Reinstall the imaging unit and the toner cartridge.</p> <p>a Remove the toner cartridge.</p> <p>b Remove the imaging unit.</p> <p>Warning—Potential Damage: Do not expose the imaging unit to direct light for more than 10 minutes. Extended exposure to light can cause print quality problems.</p> <p>c Install the imaging unit, and then the cartridge.</p> <p>d Resend the print job.</p> <p>Did the gray background disappear from the prints?</p>	The problem is solved.	Go to step 3.
<p>Step 3</p> <p>Replace the imaging unit, and then resend the print job.</p> <p>Did the gray background disappear from the prints?</p>	The problem is solved.	Contact customer support .

Incorrect margins on prints



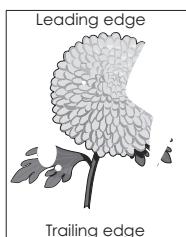
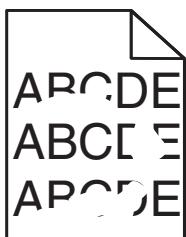
Action	Yes	No
<p>Step 1</p> <p>a Move the width and length guides in the tray to the correct positions for the paper size loaded.</p> <p>b Resend the print job.</p> <p>Are the margins correct?</p>	The problem is solved.	Go to step 2.
<p>Step 2</p> <p>From the printer control panel, set the paper size in the Paper menu to match the paper loaded in the tray.</p> <p>Does the paper size match the paper loaded in the tray?</p>	Go to step 3.	<p>Do one or more of the following:</p> <ul style="list-style-type: none"> • Specify the paper size from the tray settings to match the paper loaded in the tray. • Change the paper loaded in the tray to match the paper size specified in the tray settings.

Action	Yes	No
Step 3 <ul style="list-style-type: none"> a Depending on your operating system, specify the paper size from Printing Preferences or from the Print dialog. b Resend the print job. <p>Are the margins correct?</p>	The problem is solved.	Contact customer support .

Paper curl

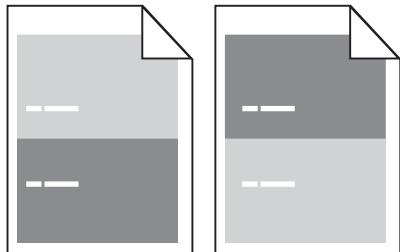
Action	Yes	No
Step 1 <p>Move the width and length guides in the tray to the correct positions for the size of the paper loaded.</p> <p>Are the width and length guides positioned correctly?</p>	Go to step 2.	Adjust the width and length guides.
Step 2 <p>From the printer control panel, set the paper type and weight in the Paper menu to match the paper loaded in the tray.</p> <p>Do the paper type and weight match the type and weight of the paper in the tray?</p>	Go to step 3.	Specify the paper type and weight from the tray settings to match the paper loaded in the tray.
Step 3 <ul style="list-style-type: none"> a Depending on your operating system, specify the paper type and weight from Printing Preferences or from the Print dialog. b Resend the print job. <p>Is the paper still curled?</p>	Go to step 4.	The problem is solved.
Step 4 <ul style="list-style-type: none"> a Remove the paper from the tray, and then turn it over. b Resend the print job. <p>Is the paper still curled?</p>	Go to step 5.	The problem is solved.
Step 5 <ul style="list-style-type: none"> a Load paper from a fresh package. Note: Paper absorbs moisture due to high humidity. Store paper in its original wrapper until you use it. b Resend the print job. <p>Is the paper still curled?</p>	Contact customer support .	The problem is solved.

Print irregularities



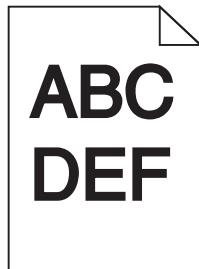
Action	Yes	No
Step 1 a Move the width and length guides in the tray to the correct positions for the size of the paper loaded in the tray. b Resend the print job.	Go to step 2.	The problem is solved.
Do print irregularities still appear?		
Step 2 From the printer control panel, set the paper size and type in the Paper menu to match the paper loaded in the tray. Do the printer settings match the type and weight of the paper loaded in the tray?	Go to step 3.	Specify the paper size and type from the tray settings to match the paper loaded in the tray.
Step 3 a Depending on your operating system, specify the paper type and weight from Printing Preferences or from the Print dialog. b Resend the print job.	Go to step 4.	The problem is solved.
Do print irregularities still appear?		
Step 4 Check if the paper loaded in the tray has texture or rough finishes. Are you printing on textured or rough paper?	From the printer control panel, set the paper texture in the Paper menu to match the paper loaded in the tray.	Go to step 5.
Step 5 a Load paper from a fresh package. Note: Paper absorbs moisture due to high humidity. Store paper in its original wrapper until you use it. b Resend the print job.	Go to step 6.	The problem is solved.
Do print irregularities still appear?		
Step 6 Replace the imaging unit, and then resend the print job.	Contact customer support at http://support.lexmark.com or your service representative.	The problem is solved.
Do print irregularities still appear?		

Repeating defects appear on prints



Action	Yes	No
<p>Step 1</p> <p>Measure the distance between the defects.</p> <p>Check for a distance between the defects that equals:</p> <ul style="list-style-type: none"> • 97 mm (3.82 in.) • 47 mm (1.85 in.) • 38 mm (1.5 in.) <p>Is the distance between defects equal to one of the listed measurements?</p>	Go to step 2.	<p>1 Check if the distance between the defects equal to 80 mm (3.15 in.)</p> <p>2 Take note of the distance, and then contact customer support at http://support.lexmark.com or your service representative.</p>
<p>Step 2</p> <p>Replace the imaging unit, and then resend the print job.</p> <p>Do the repeating defects still appear?</p>	Contact customer support at http://support.lexmark.com or your service representative.	The problem is solved.

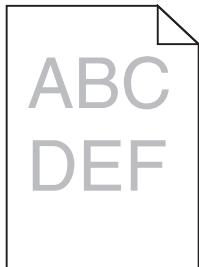
Print is too dark



Action	Yes	No
<p>Step 1</p> <p>a From the Quality menu on the printer control panel, reduce the toner darkness.</p> <p>Note: 8 is the factory default setting.</p> <p>b Resend the print job.</p> <p>Is the print still too dark?</p>	Go to step 2.	The problem is solved.

Action	Yes	No
Step 2 <p>a From the printer control panel, set the paper type, texture and weight in the Paper menu to match the paper loaded in the tray.</p> <p>b Resend the print job.</p> <p>Is the tray set to the type, texture, and weight of the paper loaded?</p>	Go to step 3.	Do one or more of the following: <ul style="list-style-type: none"> Specify the paper type, texture, and weight from the tray settings to match the paper loaded in the tray. Change the paper loaded in the tray to match the paper type, texture and weight specified in the tray settings.
Step 3 <p>a Depending on your operating system, specify the paper type, texture and weight from Printing Preferences or from the Print dialog.</p> <p>b Resend the print job.</p> <p>Is the print still too dark?</p>	Go to step 4.	The problem is solved.
Step 4 <p>Check if the paper loaded in the tray has texture or rough finishes.</p> <p>Are you printing on textured or rough paper?</p>	From the printer control panel, change the texture settings in the Paper Texture menu to match the paper you are printing on.	Go to step 5.
Step 5 <p>a Load paper from a fresh package.</p> <p>Note: Paper absorbs moisture due to high humidity. Store paper in its original wrapper until you use it.</p> <p>b Resend the print job.</p> <p>Is the print still too dark?</p>	Go to step 6.	The problem is solved.
Step 6 <p>Replace the imaging unit, and then resend the print job.</p> <p>Is the print still too dark?</p>	Contact customer support .	The problem is solved.

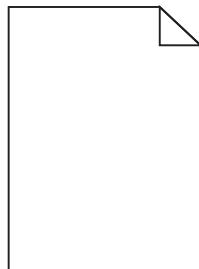
Print is too light



Action	Yes	No
Step 1 <p>a From the Quality menu on the printer control panel, increase the toner darkness. Note: 8 is the factory default setting.</p> <p>b Resend the print job.</p> <p>Is the print still too light?</p>	Go to step 2.	The problem is solved.
Step 2 <p>From the printer control panel, set the paper type, texture, and weight in the Paper menu to match the paper loaded in the tray.</p> <p>Is the tray set to the type, texture, and weight of the paper loaded?</p>	Go to step 3.	Change the paper type, texture, and weight to match the paper loaded in the tray.
Step 3 <p>a Depending on your operating system, specify the paper type, texture, and weight from Printing Preferences or from the Print dialog.</p> <p>b Resend the print job.</p> <p>Is the print still too light?</p>	Go to step 4.	The problem is solved.
Step 4 <p>Make sure that the paper has no texture or rough finishes.</p> <p>Are you printing on textured or rough paper?</p>	From the printer control panel, change the texture settings in the Paper Texture menu to match the paper you are printing on.	Go to step 5.
Step 5 <p>a Load paper from a fresh package. Note: Paper absorbs moisture due to high humidity. Store paper in its original wrapper until you use it.</p> <p>b Resend the print job.</p> <p>Is the print still too light?</p>	Go to step 6.	The problem is solved.

Action	Yes	No
<p>Step 6</p> <p>a Redistribute the toner in the imaging unit.</p> <ol style="list-style-type: none"> 1 Remove the toner cartridge, and then the imaging unit. 2 Firmly shake the imaging unit. <p>Warning—Potential Damage: Do not expose the imaging unit to direct light for more than 10 minutes. Extended exposure to light may cause print quality problems.</p> <ol style="list-style-type: none"> 3 Install the imaging unit, and then the cartridge. <p>b Resend the print job.</p> <p>Is the print still too light?</p>	Go to step 7.	The problem is solved.
<p>Step 7</p> <p>Replace the imaging unit, and then resend the print job.</p> <p>Is the print still too light?</p>	Contact customer support .	The problem is solved.

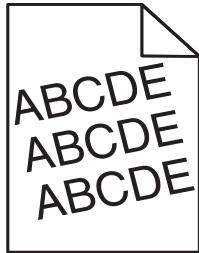
Printer is printing blank pages



Action	Yes	No
<p>Step 1</p> <p>a Check if there is packing material left on the imaging unit.</p> <ol style="list-style-type: none"> 1 Remove the toner cartridge, and then the imaging unit. 2 Check if the packing material is properly removed from the imaging unit. <p>Warning—Potential Damage: Do not expose the imaging unit to direct light for more than 10 minutes. Extended exposure to light may cause print quality problems.</p> <ol style="list-style-type: none"> 3 Reinstall the imaging unit, and then the cartridge. <p>b Resend the print job.</p> <p>Is the printer still printing blank pages?</p>	Go to step 2.	The problem is solved.

Action	Yes	No
<p>Step 2</p> <p>a Redistribute the toner in the imaging unit.</p> <ol style="list-style-type: none"> 1 Remove the toner cartridge, and then the imaging unit. 2 Firmly shake the imaging unit. <p>Warning—Potential Damage: Do not expose the imaging unit to direct light for more than 10 minutes. Extended exposure to light may cause print quality problems.</p> <ol style="list-style-type: none"> 3 Reinstall the imaging unit, and then the cartridge. <p>b Resend the print job.</p> <p>Is the printer still printing blank pages?</p>	Go to step 3.	The problem is solved.
<p>Step 3</p> <p>Replace the imaging unit, and then resend the print job.</p> <p>Is the printer still printing blank pages?</p>	Contact customer support .	The problem is solved.

Skewed print



Action	Yes	No
<p>Step 1</p> <p>a Move the width and length guides in the tray to the correct positions for the size of the paper loaded.</p> <p>b Resend the print job.</p> <p>Is the print still skewed?</p>	Go to step 2.	The problem is solved.
<p>Step 2</p> <p>a Check if you are printing on a paper that is supported by the tray.</p> <p>b Resend the print job.</p> <p>Is the print still skewed?</p>	Contact customer support .	The problem is solved.

Printer is printing solid black pages

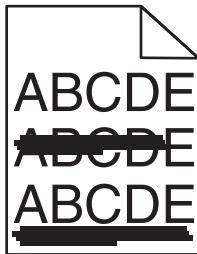


Action	Yes	No
Step 1 a Reinstall the imaging unit. 1 Remove the toner cartridge, and then the imaging unit. Warning—Potential Damage: Do not expose the imaging unit to direct light for more than 10 minutes. Extended exposure to light may cause print quality problems. 2 Install the imaging unit, and then the cartridge. b Resend the print job. Is the printer printing solid black pages?	Go to step 2.	The problem is solved.
Step 2 Replace the imaging unit, and then resend the print job. Is the printer printing solid black pages?	Contact customer support .	The problem is solved.

Transparency print quality is poor

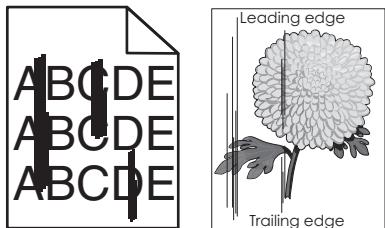
Action	Yes	No
Step 1 From the printer control panel, set the paper type in the Paper menu to match the paper loaded in the tray. Is the paper type for the tray set to Transparency?	Go to step 2.	Set the paper type to Transparency.
Step 2 a Check if you are using a recommended type of transparency. b Resend the print job. Is the print quality still poor?	Contact customer support .	The problem is solved.

Streaked horizontal lines appear on prints



Action	Yes	No
Step 1 a Depending on your operating system, specify the tray or feeder from Printing Preferences or the Print dialog. b Resend the print job.	Go to step 2.	The problem is solved.
Do streaked horizontal lines appear on prints?		
Step 2 From the printer control panel, set the paper type and weight in the Paper menu to match the paper loaded in the tray. Do the paper type and weight match the type and weight of the paper in the tray?	Go to step 3.	Change the paper type and weight to match the paper loaded in the tray.
Step 3 a Load paper from a fresh package. Note: Paper absorbs moisture due to high humidity. Store paper in its original wrapper until you use it. b Resend the print job.	Go to step 4.	The problem is solved.
Do streaked horizontal lines appear on prints?		
Step 4 a Reinstall the imaging unit. 1 Remove the toner cartridge, and then the imaging unit. Warning—Potential Damage: Do not expose the imaging unit to direct light for more than 10 minutes. Extended exposure to light may cause print quality problems. 2 Install the imaging unit, and then the cartridge. b Resend the print job.	Go to step 5.	The problem is solved.
Do streaked horizontal lines appear on prints?		
Step 5 Replace the imaging unit, and then resend the print job.	Contact customer support .	The problem is solved.
Do streaked horizontal lines appear on prints?		

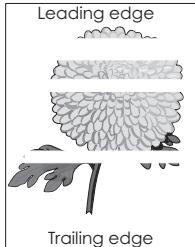
Streaked vertical lines appear on prints



Action	Yes	No
Step 1 a Depending on your operating system, specify the paper type, texture, and weight from Printing Preferences or from the Print dialog. b Resend the print job.	Go to step 2.	The problem is solved.
Do streaked vertical lines appear on prints?		
Step 2 From the printer control panel, set the paper texture, type, and weight in the Paper menu to match the paper loaded in the tray. Do the paper texture, type, and weight match the paper in the tray?	Go to step 3.	Do one or more of the following: <ul style="list-style-type: none"> • Specify the paper texture, type, and weight from the tray settings to match the paper loaded in the tray. • Change the paper loaded in the tray to match the paper texture, type, and weight specified in the tray settings.
Step 3 a Load paper from a fresh package. Note: Paper absorbs moisture due to high humidity. Store paper in its original wrapper until you use it. b Resend the print job.	Go to step 4.	The problem is solved.
Do streaked vertical lines appear on prints?		
Step 4 a Reinstall the imaging unit. 1 Remove the toner cartridge, and then the imaging unit. Warning—Potential Damage: Do not expose the imaging unit to direct light for more than 10 minutes. Extended exposure to light may cause print quality problems. 2 Install the imaging unit, and then the cartridge. b Resend the print job.	Go to step 5.	The problem is solved.
Do streaked vertical lines appear on prints?		

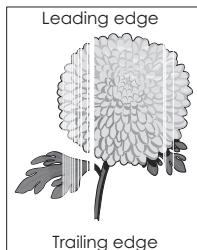
Action	Yes	No
Step 5 Replace the imaging unit, and then resend the print job. Do streaked vertical lines appear on prints?	Contact customer support at http://support.lexmark.com or your service representative.	The problem is solved.

Horizontal voids appear on prints



Action	Yes	No
Step 1 a Make sure your software program is using a correct fill pattern. b Resend the print job. Do horizontal voids appear on prints?	Go to step 2.	The problem is solved.
Step 2 a Load the specified tray or feeder with a recommended type of paper. b Resend the print job. Do horizontal voids appear on prints?	Go to step 3.	The problem is solved.
Step 3 a Redistribute the toner in the imaging unit. 1 Remove the toner cartridge, and then the imaging unit. 2 Firmly shake the imaging unit. Warning—Potential Damage: Do not expose the imaging unit to direct light for more than 10 minutes. Extended exposure to light may cause print quality problems. 3 Reinstall the imaging unit, and then the cartridge. b Resend the print job. Do horizontal voids appear on prints?	Go to step 4.	The problem is solved.
Step 4 Replace the imaging unit, and then resend the print job. Do horizontal voids appear on prints?	Contact customer support .	The problem is solved.

Vertical voids appear on prints

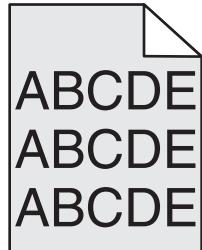


Action	Yes	No
Step 1 a Make sure your software program is using a correct fill pattern. b Resend the print job. Do vertical voids appear on prints?	Go to step 2.	The problem is solved.
Step 2 a From the printer control panel, set the paper type and weight in the Paper menu to match the paper loaded in the tray. b Resend the print job. Do vertical voids appear on prints?	Go to step 3.	The problem is solved.
Step 3 Check if you are using a recommended type of paper. a Load the indicated tray or feeder with a recommended type of paper. b Resend the print job. Do vertical voids appear on prints?	Go to step 4.	The problem is solved.
Step 4 a Redistribute the toner in the imaging unit. 1 Remove the toner cartridge, and then the imaging unit. 2 Firmly shake the imaging unit. Warning—Potential Damage: Do not expose the imaging unit to direct light for more than 10 minutes. Extended exposure to light may cause print quality problems. 3 Reinstall the imaging unit, and then the cartridge. b Resend the print job. Do vertical voids appear on prints?	Contact customer support . Note: The laser scanning unit may be defective.	The problem is solved.

Toner specks appear on prints

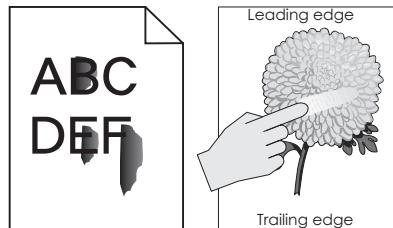
Action	Yes	No
Replace the imaging unit, and then resend the print job.	Contact customer support .	The problem is solved.
Do toner specks appear on prints?		

Toner fog or background shading appears on prints



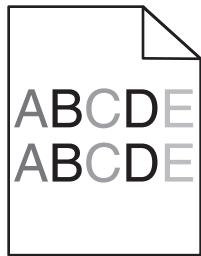
Action	Yes	No
Step 1 Reinstall the imaging unit. a Remove, and then install the imaging unit. b Resend the print job.	Go to step 2.	The problem is solved.
Does fog or shading appear on prints?		
Step 2 Replace the imaging unit, and then resend the print job.	Contact customer support at http://support.lexmark.com or your service representative.	The problem is solved.
Does fog or shading appear on prints?		

Toner rubs off



Action	Yes	No
Step 1 From the Paper menu on the printer control panel, check the paper type and weight. Do the paper type and texture match the paper loaded in the tray?	Go to step 2.	Specify the paper type and weight from the tray settings to match the paper loaded in the tray.
Step 2 Check if you are printing on paper with texture or rough finishes. Are you printing on textured or rough paper?	From the Paper menu on the printer control panel, set the paper texture.	Contact customer support .

Uneven print density



Action	Yes	No
Replace the imaging unit, and then resend the print job.	Contact customer support .	The problem is solved.
Is the print density uneven?		

Solving home screen applications problems

This troubleshooting step applies only to touch-screen printer models.

An application error has occurred

Action	Yes	No
Step 1 Check the system log for relevant details. a Open a Web browser, and then type the printer IP address in the address field. If you do not know the IP address of the printer, then you can: <ul style="list-style-type: none">• View the IP address on the printer home screen.• Print a network setup page or the menu settings pages, and then locate the IP address in the TCP/IP section. Note: An IP address appears as four sets of numbers separated by periods, such as 123.123.123.123. b Click Settings > Apps > Apps Management > System tab > Log . c From the Filter menu, select an application status. d From the Application menu, select an application, and then click Submit . Does an error message appear in the log?	Go to step 2.	Contact customer support .
Step 2 Resolve the error. Is the application working now?	The problem is solved.	Contact customer support .

Embedded Web Server does not open

Action	Yes	No
Step 1 a Turn on the printer. b Open a Web browser, and then type the printer IP address. c Press Enter . Does the Embedded Web Server open?	The problem is solved.	Go to step 2.

Action	Yes	No
<p>Step 2</p> <p>Make sure the printer IP address is correct.</p> <p>a View the printer IP address:</p> <ul style="list-style-type: none"> • From the TCP/IP section in the Network/Ports menu • By printing a network setup page or menu settings page, and then finding the TCP/IP section <p>Note: An IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.</p> <p>b Open a Web browser, and then type the IP address.</p> <p>Note: Depending on the network settings, you may need to type “https://” instead of “http://” before the printer IP address to access the Embedded Web Server.</p> <p>c Press Enter.</p> <p>Does the Embedded Web Server open?</p>	The problem is solved.	Go to step 3.
<p>Step 3</p> <p>Check if the network is working.</p> <p>a Print a network setup page.</p> <p>b Check the first section of the network setup page and confirm that the status is Connected.</p> <p>Note: If the status is Not Connected, then the connection may be intermittent, or the network cable may be defective. Contact your system support person for a solution, and then print another network setup page.</p> <p>c Open a Web browser, and then type the printer IP address.</p> <p>d Press Enter.</p> <p>Does the Embedded Web Server open?</p>	The problem is solved.	Go to step 4.
<p>Step 4</p> <p>Check if the cable connections to the printer and print server are secure.</p> <p>a Connect the cables properly. For more information, see the setup documentation that came with the printer.</p> <p>b Open a Web browser, and then type the printer IP address.</p> <p>c Press Enter.</p> <p>Does the Embedded Web Server open?</p>	The problem is solved.	Go to step 5.
<p>Step 5</p> <p>Temporarily disable the Web proxy servers.</p> <p>Proxy servers may block or restrict you from accessing certain Web sites including the Embedded Web Server.</p> <p>Does the Embedded Web Server open?</p>	The problem is solved.	Contact your system support person.

Contacting customer support

When you contact customer support, describe the problem you are experiencing, the message on the printer display, and the troubleshooting steps you have already taken to find a solution.

You need to know your printer model type and serial number. For more information, see the label on the inside top front cover or at the back of the printer. The serial number is also listed on the menu settings page.

Lexmark has various ways to help you solve your printing problem. Visit the Lexmark Web site at <http://support.lexmark.com>, and then select one of the following:

Tech Library	You can browse our library of manuals, support documentation, drivers, and other downloads to help you solve common problems.
E-mail	You can send an e-mail to the Lexmark team, describing your problem. A service representative will respond and provide you with information to solve your problem.
Live chat	You can chat directly with a service representative. They can work with you to solve your printer problem or provide assistance through Assisted Service where the service representative can remotely connect to your computer through the Internet to troubleshoot problems, install updates, or complete other tasks to help you successfully use your Lexmark product.

Telephone support is also available. In the U.S. or Canada, call 1-800-539-6275. For other countries or regions, visit the Lexmark Web site at <http://support.lexmark.com>.

Notices

Product information

Product name:

Lexmark MS510dn, MS610dn, and MS610de

Machine type:

4514

Model(s):

630, 635, 646

Edition notice

May 2013

The following paragraph does not apply to any country where such provisions are inconsistent with local law:

LEXMARK INTERNATIONAL, INC., PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions; therefore, this statement may not apply to you.

This publication could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in later editions. Improvements or changes in the products or the programs described may be made at any time.

References in this publication to products, programs, or services do not imply that the manufacturer intends to make these available in all countries in which it operates. Any reference to a product, program, or service is not intended to state or imply that only that product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any existing intellectual property right may be used instead. Evaluation and verification of operation in conjunction with other products, programs, or services, except those expressly designated by the manufacturer, are the user's responsibility.

For Lexmark technical support, visit <http://support.lexmark.com>.

For information on supplies and downloads, visit www.lexmark.com.

© 2013 Lexmark International, Inc.

All rights reserved.

GOVERNMENT END USERS

The Software Program and any related documentation are "Commercial Items," as that term is defined in 48 C.F.R. 2.101, "Computer Software" and "Commercial Computer Software Documentation," as such terms are used in 48 C.F.R. 12.212 or 48 C.F.R. 227.7202, as applicable. Consistent with 48 C.F.R. 12.212 or 48 C.F.R. 227.7202-1 through 227.7207-4, as applicable, the Commercial Computer Software and Commercial Software Documentation are licensed to the U.S. Government end users (a) only as Commercial Items and (b) with only those rights as are granted to all other end users pursuant to the terms and conditions herein.

Trademarks

Lexmark, Lexmark with diamond design, and MarkVision are trademarks of Lexmark International, Inc., registered in the United States and/or other countries.

PrintCryption is a trademark of Lexmark International, Inc.

Mac and the Mac logo are trademarks of Apple Inc., registered in the U.S. and other countries.

PCL® is a registered trademark of the Hewlett-Packard Company. PCL is Hewlett-Packard Company's designation of a set of printer commands (language) and functions included in its printer products. This printer is intended to be compatible with the PCL language. This means the printer recognizes PCL commands used in various application programs, and that the printer emulates the functions corresponding to the commands.

The following terms are trademarks or registered trademarks of these companies:

Albertus	The Monotype Corporation plc
Antique Olive	Monsieur Marcel OLIVE
Apple-Chancery	Apple Computer, Inc.
Arial	The Monotype Corporation plc
CG Times	Based on Times New Roman under license from The Monotype Corporation plc, is a product of Agfa Corporation
Chicago	Apple Computer, Inc.
Clarendon	Linotype-Hell AG and/or its subsidiaries
Eurostile	Nebiolo
Geneva	Apple Computer, Inc.
GillSans	The Monotype Corporation plc
Helvetica	Linotype-Hell AG and/or its subsidiaries
Hoefler	Jonathan Hoefler Type Foundry
ITC Avant Garde Gothic	International Typeface Corporation
ITC Bookman	International Typeface Corporation
ITC Mona Lisa	International Typeface Corporation
ITC Zapf Chancery	International Typeface Corporation
Joanna	The Monotype Corporation plc
Marigold	Arthur Baker
Monaco	Apple Computer, Inc.
New York	Apple Computer, Inc.
Oxford	Arthur Baker
Palatino	Linotype-Hell AG and/or its subsidiaries
Stempel Garamond	Linotype-Hell AG and/or its subsidiaries
Taffy	Agfa Corporation
Times New Roman	The Monotype Corporation plc

Univers	Linotype-Hell AG and/or its subsidiaries
---------	--

All other trademarks are the property of their respective owners.

AirPrint and the AirPrint logo are trademarks of Apple, Inc.

Federal Communications Commission (FCC) compliance information statement

This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The FCC Class B limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult your point of purchase or service representative for additional suggestions.

The manufacturer is not responsible for radio or television interference caused by using other than recommended cables or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate this equipment.

Note: To assure compliance with FCC regulations on electromagnetic interference for a Class B computing device, use a properly shielded and grounded cable such as Lexmark part number 1021231 for parallel attach or 1021294 for USB attach. Use of a substitute cable not properly shielded and grounded may result in a violation of FCC regulations.

Any questions regarding this compliance information statement should be directed to:

Director of Lexmark Technology & Services
Lexmark International, Inc.
740 West New Circle Road
Lexington, KY 40550
(859) 232-3000

Modular component notice

Wireless-equipped models contain the following modular component(s):

Lexmark Regulatory Type/Model LEX-M01-005; FCC ID:IYLLEXM01005; IC:2376A-M01005

Licensing notices

All licensing notices associated with this product can be viewed from the root directory of the installation software CD.

Noise emission levels

The following measurements were made in accordance with ISO 7779 and reported in conformance with ISO 9296.

Note: Some modes may not apply to your product.

1-meter average sound pressure, dBA	
Printing	55 dBA (simplex); 54 dBA (duplex)
Ready	N/A

Values are subject to change. See www.lexmark.com for current values.

Waste from Electrical and Electronic Equipment (WEEE) directive



The WEEE logo signifies specific recycling programs and procedures for electronic products in countries of the European Union. We encourage the recycling of our products.

If you have further questions about recycling options, visit the Lexmark Web site at www.lexmark.com for your local sales office phone number.

Product disposal

Do not dispose of the printer or supplies in the same manner as normal household waste. Consult your local authorities for disposal and recycling options.

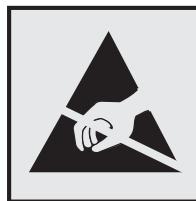
Taiwan waste dry cell batteries recycle logo notice

According to Article 15 of the Waste Disposal Act in the announcement of Taiwan EPA, the producing or the importing manufacturer is responsible for recycling, clearance, and disposal of dry cell batteries, batteries packaged with products and sold, given, and promoted with products to consumers may be labeled with the recycling mark with the remark "please recycle waste batteries" on the product package, the label, or the product manual. Enclosed please find the waste dry cell batteries recycle logo with the remark. Please give the waste dry cell batteries to a company who has

the waste dry cell batteries recycle logo and provides the recycle service in order to have the appropriate process for the waste dry cell batteries.



Static sensitivity notice



This symbol identifies static-sensitive parts. Do not touch in the areas near these symbols without first touching the metal frame of the printer.

ENERGY STAR

Any Lexmark product bearing the ENERGY STAR emblem on the product or on a start-up screen is certified to comply with Environmental Protection Agency (EPA) ENERGY STAR requirements as configured when shipped by Lexmark.



Temperature information

Ambient operating temperature	15.6 to 32.2°C (60 to 90°F)
Shipping temperature	-40 to 43.3°C (-40 to 110°F)
Storage temperature and relative humidity	1 to 35°C (34 to 95°F) 8 to 80% RH

Laser notice

The printer is certified in the U.S. to conform to the requirements of DHHS 21 CFR, Chapter I, Subchapter J for Class I (1) laser products, and elsewhere is certified as a Class I laser product conforming to the requirements of IEC 60825-1.

Class I laser products are not considered to be hazardous. The printer contains internally a Class IIIb (3b) laser that is nominally a 7 milliwatt gallium arsenide laser operating in the wavelength of 655-675 nanometers. The laser system and printer are designed so there is never any human access to laser radiation above a Class I level during normal operation, user maintenance, or prescribed service condition.

Laser advisory label

A laser notice label may be affixed to this printer as shown:

DANGER - Invisible laser radiation when cartridges are removed and interlock defeated. Avoid exposure to laser beam.
 PERIGO - Radiação a laser invisível será liberada se os cartuchos forem removidos e o lacre rompido. Evite a exposição aos feixes de laser.
 Opasnost - Nevidljivo lasersko zračenje kada su kasete uklonjene i poništena sigurnosna veza. Izbjegavati izlaganje zracima.
 NEBEZPEČÍ - Když jsou vyjmuty kazety a je odblokována pojistka, ze zařízení je vysíláno neviditelné laserové záření. Nevystavujte se působení laserového paprsku.
 FARE - Usynlig laserstråling, når patroner fjernes, og spærreanordningen er slået fra. Undgå at blive utsat for laserstrålen.
 GEVAAR - Onzichtbare laserstraling wanneer cartridges worden verwijderd en een vergrendeling wordt genegeerd. Voorkom blootstelling aan de laser.
 DANGER - Rayonnements laser invisibles lors du retrait des cartouches et du déverrouillage des loquets. Eviter toute exposition au rayon laser.
 VAARA - Näkymätöntä lasersäteilyä on varottava, kun värikasetit on poistettu ja lukitus on auki. Vältä lasersäteelle altistumista.
 GEFAHR - Unsichtbare Laserstrahlung beim Herausnehmen von Druckkassetten und offener Sicherheitssperre. Laserstrahl meiden.
 ΚΙΝΔΥΝΟΣ - Έκλυση αόρατης ακτινοβολίας laser κατά την αφαίρεση των κασετών και την απασφάλιση της μανδάλωσης. Αποφέύγετε την έκθεση στην ακτινοβολία laser.
 VESZÉLY - Nem látható lézersugárzás fordulhat elő a patronok eltávolításakor és a zárószerkezet felbontásakor. Kerülje a lézersugárnak való kitettséget.
 PERICOLO - Emissione di radiazioni laser invisibili durante la rimozione delle cartucce e del blocco. Evitare l'esposizione al raggio laser.
 FARE - Usynlig laserstråling når kassettene tas ut og sperren er satt ut av spill. Unngå eksponering for laserstrålen.
 NIEBEZPIECZEŃSTWO - niewidzialne promieniowanie laserowe podczas usuwania kaset i blokady. Należy unikać naświetlenia promieniem lasera.
 ОПАСНО! Невидимое лазерное излучение при извлеченных картриджах и снятии блокировки. Избегайте воздействия лазерных лучей.
 Pozor - Nebezpečenstvo neviditeľného laserového žiarenia pri odobratých kazetách a odblokovanej poistke. Nevystavujte sa lúčom.
 PELIGRO: Se producen radiaciones láser invisibles al extraer los cartuchos con el interbloqueo desactivado. Evite la exposición al haz de láser.
 FARA - Osynlig laserstrålning när patroner tas ur och spärrmekanismen är upphävd. Undvik exponering för laserstrålen.
 危险 - 当移除碳粉盒及互锁失效时会产生看不见的激光辐射, 请避免暴露在激光光束下。
 危險 - 移除碳粉匣與安全連續開關失效時會產生看不見的雷射輻射。請避免曝露在雷射光束下。
 危険 - カートリッジが取り外され、内部ロックが無効になると、見えないレーザー光が放射されます。このレーザー光に当たらないようにしてください。

Power consumption

Product power consumption

The following table documents the power consumption characteristics of the product.

Note: Some modes may not apply to your product.

Mode	Description	Power consumption (Watts)
Printing	The product is generating hard-copy output from electronic inputs.	600 (MS510dn); 640 (MS610dn, MS610de)
Copy	The product is generating hard-copy output from hard-copy original documents.	NA
Scan	The product is scanning hard-copy documents.	NA
Ready	The product is waiting for a print job.	10 (MS510 and MS610dn); 12 (MS610de)
Sleep Mode	The product is in a high-level energy-saving mode.	5 (MS510 and MS610dn); 5.5 (MS610de)

Mode	Description	Power consumption (Watts)
Hibernate	The product is in a low-level energy-saving mode.	1
Off	The product is plugged into an electrical outlet, but the power switch is turned off.	0

The power consumption levels listed in the previous table represent time-averaged measurements. Instantaneous power draws may be substantially higher than the average.

Values are subject to change. See www.lexmark.com for current values.

Sleep Mode

This product is designed with an energy-saving mode called *Sleep Mode*. The Sleep Mode saves energy by lowering power consumption during extended periods of inactivity. The Sleep Mode is automatically engaged after this product is not used for a specified period of time, called the *Sleep Mode Timeout*.

Factory default Sleep Mode Timeout for this product (in minutes):	30
---	----

By using the configuration menus, the Sleep Mode Timeout can be modified between 1 minute and 120 minutes. Setting the Sleep Mode Timeout to a low value reduces energy consumption, but may increase the response time of the product. Setting the Sleep Mode Timeout to a high value maintains a fast response, but uses more energy.

Hibernate Mode

This product is designed with an ultra-low power operating mode called *Hibernate mode*. When operating in Hibernate Mode, all other systems and devices are powered down safely.

The Hibernate mode can be entered in any of the following methods:

- Using the Hibernate Timeout
- Using the Schedule Power modes
- Using the Sleep/Hibernate button

Factory default Hibernate Timeout for this product in all countries or regions except for EU countries and Switzerland	Disabled
Factory default value for this product in EU countries or regions and Switzerland	3 days

The amount of time the printer waits after a job is printed before it enters Hibernate mode can be modified between one hour and one month.

Off mode

If this product has an off mode which still consumes a small amount of power, then to completely stop product power consumption, disconnect the power supply cord from the electrical outlet.

Total energy usage

It is sometimes helpful to calculate the total product energy usage. Since power consumption claims are provided in power units of Watts, the power consumption should be multiplied by the time the product spends in each mode in order to calculate energy usage. The total product energy usage is the sum of each mode's energy usage.

Industry Canada compliance statement

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Standard ICES-003.

Avis de conformité aux normes de l'industrie du Canada

Cet appareil numérique de classe B est conforme aux exigences de la norme canadienne relative aux équipements pouvant causer des interférences NMB-003.

日本のVCCI規定

製品にこのマークが表示されている場合、次の要件を満たしています。



この装置は、クラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをしてください。

VCCI-B

European Community (EC) directives conformity

This product is in conformity with the protection requirements of EC Council directives 2004/108/EC, 2006/95/EC and 2009/125/EC on the approximation and harmonization of the laws of the Member States relating to electromagnetic compatibility, safety of electrical equipment designed for use within certain voltage limits and the ecodesign of energy-related products.

The manufacturer of this product is: Lexmark International, Inc., 740 West New Circle Road, Lexington, KY, 40550 USA.
The authorized representative is: Lexmark International Technology Hungária Kft., 8 Lechner Ödön fasor, Millennium Tower III, 1095 Budapest HUNGARY, A declaration of conformity to the requirements of the Directives is available upon request from the Authorized Representative.

This product satisfies the Class B limits of EN 55022 and safety requirements of EN 60950.

Regulatory notices for wireless products

This section contains the following regulatory information pertaining to wireless products that contain transmitters, for example, but not limited to, wireless network cards or proximity card readers.

Exposure to radio frequency radiation

The radiated output power of this device is far below the radio frequency exposure limits of the FCC and other regulatory agencies. A minimum separation of 20 cm (8 inches) must be maintained between the antenna and any persons for this device to satisfy the RF exposure requirements of the FCC and other regulatory agencies.

Industry Canada (Canada)

This device complies with Industry Canada specification RSS-210. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

This device has been designed to operate only with the antenna provided. Use of any other antenna is strictly prohibited per regulations of Industry Canada.

To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.

The installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RF fields in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's Web site www.hc-sc.gc.ca/rpb.

The term "IC:" before the certification/registration number only signifies that the Industry Canada technical specifications were met.

Industry Canada (Canada)

Cet appareil est conforme à la norme RSS-210 d'Industry Canada. Son fonctionnement est soumis aux deux conditions suivantes :

(1) cet appareil ne doit pas provoquer d'interférences et (2) il doit accepter toute interférence reçue, y compris celles risquant d'altérer son fonctionnement.

Cet appareil a été conçu pour fonctionner uniquement avec l'antenne fournie. L'utilisation de toute autre antenne est strictement interdite par la réglementation d'Industry Canada.

En application des réglementations d'Industry Canada, l'utilisation d'une antenne de gain supérieur est strictement interdite.

Pour empêcher toute interférence radio au service faisant l'objet d'une licence, cet appareil doit être utilisé à l'intérieur et loin des fenêtres afin de garantir une protection optimale.

Si le matériel (ou son antenne d'émission) est installé à l'extérieur, il doit faire l'objet d'une licence.

L'installateur de cet équipement radio doit veiller à ce que l'antenne soit implantée et dirigée de manière à n'émettre aucun champ HF dépassant les limites fixées pour l'ensemble de la population par Santé Canada. Reportez-vous au Code de sécurité 6 que vous pouvez consulter sur le site Web de Santé Canada www.hc-sc.gc.ca/rpb.

Le terme « IC » précédant le numéro de d'accréditation/inscription signifie simplement que le produit est conforme aux spécifications techniques d'Industry Canada.

Notice to users in the European Union

This product is in conformity with the protection requirements of EC Council directives 2004/108/EC, 2006/95/EC, 1999/5/EC, and 2009/125/EC on the approximation and harmonization of the laws of the Member States relating to electromagnetic compatibility, safety of electrical equipment designed for use within certain voltage limits, radio equipment and telecommunications terminal equipment and on the ecodesign of energy-related products.

Compliance is indicated by the CE marking.



The manufacturer of this product is: Lexmark International, Inc., 740 West New Circle Road, Lexington, KY, 40550 USA.
The authorized representative is: Lexmark International Technology Hungária Kft., 8 Lechner Ödön fasor, Millennium Tower III, 1095 Budapest HUNGARY, A declaration of conformity to the requirements of the Directives is available upon request from the Authorized Representative.

This product satisfies the Class B limits of EN 55022 and safety requirements of EN 60950.

Products equipped with 2.4GHz Wireless LAN option are in conformity with the protection requirements of EC Council directives 2004/108/EC, 2006/95/EC, 1999/5/EC, and 2009/125/EC on the approximation and harmonization of the laws of the Member States relating to electromagnetic compatibility, safety of electrical equipment designed for use within certain voltage limits and on radio equipment and telecommunications terminal equipment and on the ecodesign of energy-related products.

Compliance is indicated by the CE marking.



Operation is allowed in all EU and EFTA countries, but is restricted to indoor use only.

The manufacturer of this product is: Lexmark International, Inc., 740 West New Circle Road, Lexington, KY, 40550 USA.
The authorized representative is: Lexmark International Technology Hungária Kft., 8 Lechner Ödön fasor, Millennium Tower III, 1095 Budapest HUNGARY, A declaration of conformity to the requirements of the Directives is available upon request from the Authorized Representative.

This product may be used in the countries indicated in the table below.

AT	BE	BG	CH	CY	CZ	DE	DK	EE
EL	ES	FI	FR	HR	HU	IE	IS	IT
LI	LT	LU	LV	MT	NL	NO	PL	PT
RO	SE	SI	SK	TR	UK			

Česky	Společnost Lexmark International, Inc. tímto prohlašuje, že výrobek tento výrobek je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
Dansk	Lexmark International, Inc. erklærer herved, at dette produkt overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
Deutsch	Hiermit erklärt Lexmark International, Inc., dass sich das Gerät dieses Gerät in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
Ελληνική	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ Η LEXMARK INTERNATIONAL, INC. ΔΗΛΩΝΕΙ ΟΤΙ ΑΥΤΟ ΤΟ ΠΡΟΪΟΝ ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/EK.
English	Hereby, Lexmark International, Inc., declares that this type of equipment is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Español	Por medio de la presente, Lexmark International, Inc. declara que este producto cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
Eesti	Käesolevaga kinnitab Lexmark International, Inc., et seade see toode vastab direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele muudele asjakohastele sätetele.
Suomi	Lexmark International, Inc. vakuuttaa täten, että tämä tuote on direktiivin 1999/5/EY oleellisten vaatimusten ja muiden sitä koskevien direktiivin ehtojen mukainen.
Français	Par la présente, Lexmark International, Inc. déclare que l'appareil ce produit est conforme aux exigences fondamentales et autres dispositions pertinentes de la directive 1999/5/CE.
Magyar	Alulírott, Lexmark International, Inc. nyilatkozom, hogy a termék megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.
Íslenska	Hér með lýsir Lexmark International, Inc. yfir því að þessi vara er í samræmi við grunnkröfur og aðrar kröfur, sem gerðar eru í tilskipun 1999/5/EC.
Italiano	Con la presente Lexmark International, Inc. dichiara che questo questo prodotto è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Latviski	Ar šo Lexmark International, Inc. deklarē, ka šis izstrādājums atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
Lietuvių	Šiuo Lexmark International, Inc. deklaruoja, kad šis produktas atitinka esminius reikalavimus ir kitas 1999/5/EB direktyvos nuostatas.
Malti	Bil-preženti, Lexmark International, Inc., jiddikjara li dan il-prodott huwa konformi mal-ħtiġijiet essenzjali u ma dispożizzjonijiet oħrajn relevanti li jinsabu fid-Direttiva 1999/5/KE.
Nederlands	Hierbij verklaart Lexmark International, Inc. dat het toestel dit product in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
Norsk	Lexmark International, Inc. erklærer herved at dette produktet er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 1999/5/EF.
Polski	Niniejszym Lexmark International, Inc. oświadcza, że niniejszy produkt jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
Português	A Lexmark International Inc. declara que este este produto está conforme com os requisitos essenciais e outras disposições da Diretiva 1999/5/CE.
Slovensky	Lexmark International, Inc. týmto vyhlasuje, že tento produkt splňa základné požiadavky a všetky príslušné ustanovenia smernice 1999/5/ES.
Slovensko	Lexmark International, Inc. izjavlja, da je ta izdelek v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
Svenska	Härmed intygar Lexmark International, Inc. att denna produkt står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

STATEMENT OF LIMITED WARRANTY FOR LEXMARK LASER PRINTERS, LEXMARK LED PRINTERS, AND LEXMARK MULTIFUNCTION LASER PRINTERS

Lexmark International, Inc., Lexington, KY

This limited warranty applies to the United States and Canada. For customers outside the U.S., refer to the country-specific warranty information that came with your product.

This limited warranty applies to this product only if it was originally purchased for your use, and not for resale, from Lexmark or a Lexmark Remarketer, referred to in this statement as "Remarketer."

Limited warranty

Lexmark warrants that this product:

- Is manufactured from new parts, or new and serviceable used parts, which perform like new parts
- Is, during normal use, free from defects in material and workmanship

If this product does not function as warranted during the warranty period, contact a Remarketer or Lexmark for repair or replacement (at Lexmark's option).

If this product is a feature or option, this statement applies only when that feature or option is used with the product for which it was intended. To obtain warranty service, you may be required to present the feature or option with the product.

If you transfer this product to another user, warranty service under the terms of this statement is available to that user for the remainder of the warranty period. You should transfer proof of original purchase and this statement to that user.

Limited warranty service

The warranty period starts on the date of original purchase as shown on the purchase receipt and ends 12 months later provided that the warranty period for any supplies and for any maintenance items included with the printer shall end earlier if it, or its original contents, are substantially used up, depleted, or consumed. Fuser Units, Transfer/Transport Units, Paper Feed items, if any, and any other items for which a Maintenance Kit is available are substantially consumed when the printer displays a "Life Warning" or "Scheduled Maintenance" message for such item.

To obtain warranty service you may be required to present proof of original purchase. You may be required to deliver your product to the Remarketer or Lexmark, or ship it prepaid and suitably packaged to a Lexmark designated location. You are responsible for loss of, or damage to, a product in transit to the Remarketer or the Lexmark designated location.

When warranty service involves the exchange of a product or part, the item replaced becomes the property of the Remarketer or Lexmark. The replacement may be a new or repaired item.

The replacement item assumes the remaining warranty period of the original product.

Replacement is not available to you if the product you present for exchange is defaced, altered, in need of a repair not included in warranty service, damaged beyond repair, or if the product is not free of all legal obligations, restrictions, liens, and encumbrances.

As part of your warranty service and/or replacement, Lexmark may update the firmware in your printer to the latest version. Firmware updates may modify printer settings and cause counterfeit and/or unauthorized products, supplies, parts, materials (such as toners and inks), software, or interfaces to stop working. Authorized use of genuine Lexmark products will not be impacted.

Before you present this product for warranty service, remove all print cartridges, programs, data, and removable storage media (unless directed otherwise by Lexmark).

For further explanation of your warranty alternatives and the nearest Lexmark authorized servicer in your area contact Lexmark on the World Wide Web.

Remote technical support is provided for this product throughout its warranty period. For products no longer covered by a Lexmark warranty, technical support may not be available or only be available for a fee.

Extent of limited warranty

Lexmark does not warrant uninterrupted or error-free operation of any product or the durability or longevity of prints produced by any product.

Warranty service does not include repair of failures caused by:

- Modification or unauthorized attachments
- Accidents, misuse, abuse or use inconsistent with Lexmark user's guides, manuals, instructions or guidance
- Unsuitable physical or operating environment
- Maintenance by anyone other than Lexmark or a Lexmark authorized servicer
- Operation of a product beyond the limit of its duty cycle
- Use of printing media outside of Lexmark specifications
- Refurbishment, repair, refilling or remanufacture by a third party of products, supplies or parts
- Products, supplies, parts, materials (such as toners and inks), software, or interfaces not furnished by Lexmark

TO THE EXTENT PERMITTED BY APPLICABLE LAW, NEITHER LEXMARK NOR ITS THIRD PARTY SUPPLIERS OR REMARKETERS MAKE ANY OTHER WARRANTY OR CONDITION OF ANY KIND, WHETHER EXPRESS OR IMPLIED, WITH RESPECT TO THIS PRODUCT, AND SPECIFICALLY DISCLAIM THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND SATISFACTORY QUALITY. ANY WARRANTIES THAT MAY NOT BE DISCLAIMED UNDER APPLICABLE LAW ARE LIMITED IN DURATION TO THE WARRANTY PERIOD. NO WARRANTIES, EXPRESS OR IMPLIED, WILL APPLY AFTER THIS PERIOD. ALL INFORMATION, SPECIFICATIONS, PRICES, AND SERVICES ARE SUBJECT TO CHANGE AT ANY TIME WITHOUT NOTICE.

Limitation of liability

Your sole remedy under this limited warranty is set forth in this document. For any claim concerning performance or nonperformance of Lexmark or a Remarketer for this product under this limited warranty, you may recover actual damages up to the limit set forth in the following paragraph.

Lexmark's liability for actual damages from any cause whatsoever will be limited to the amount you paid for the product that caused the damages. This limitation of liability will not apply to claims by you for bodily injury or damage to real property or tangible personal property for which Lexmark is legally liable. **IN NO EVENT WILL LEXMARK BE LIABLE FOR ANY LOST PROFITS, LOST SAVINGS, INCIDENTAL DAMAGE, OR OTHER ECONOMIC OR CONSEQUENTIAL DAMAGES.** This is true even if you advise Lexmark or a Remarketer of the possibility of such damages. Lexmark is not liable for any claim by you based on a third party claim.

This limitation of remedies also applies to claims against any Suppliers and Remarketers of Lexmark. Lexmark's and its Suppliers' and Remarketers' limitations of remedies are not cumulative. Such Suppliers and Remarketers are intended beneficiaries of this limitation.

Additional rights

Some states do not allow limitations on how long an implied warranty lasts, or do not allow the exclusion or limitation of incidental or consequential damages, so the limitations or exclusions contained above may not apply to you.

This limited warranty gives you specific legal rights. You may also have other rights that vary from state to state.

Patent acknowledgment

The use of this product or service is subject to the reasonable, non-discriminatory terms in the Intellectual Property Rights (IPR) Disclosure of Certicom Corp. at the IETF for Elliptic Curve Cryptography (ECC) Cipher Suites for Transport Layer Security (TLS) implemented in the product or service.

The use of this product or service is subject to the reasonable, non-discriminatory terms in the Intellectual Property Rights (IPR) Disclosure of Certicom Corp. at the IETF for TLS Elliptic Curve Cipher Suites with SHA-256/382 and AES Galois Counter Mode (GCM) implemented in the product or service.

The use of this product or service is subject to the reasonable, non-discriminatory terms in the Intellectual Property Rights (IPR) Disclosure of Certicom Corp. at the IETF for TLS Suite B Profile for Transport Layer Security (TLS) implemented in the product or service.

The use of this product or service is subject to the reasonable, non-discriminatory terms in the Intellectual Property Rights (IPR) Disclosure of Certicom Corp. at the IETF for Addition of the Camellia Cipher Suites to Transport Layer Security (TLS) implemented in the product or service.

The use of certain patents in this product or service is subject to the reasonable, non-discriminatory terms in the Intellectual Property Rights (IPR) Disclosure of Certicom Corp. at the IETF for AES-CCM ECC Cipher Suites for TLS implemented in the product or service.

The use of this product or service is subject to the reasonable, non-discriminatory terms in the Intellectual Property Rights (IPR) Disclosure of Certicom Corp. at the IETF for IKE and IKEv2 Authentication Using the Elliptic Curve Digital Signature Algorithm (ECDSA) implemented in the product or service.

The use of this product or service is subject to the reasonable, non-discriminatory terms in the Intellectual Property Rights (IPR) Disclosure of Certicom Corp. at the IETF for Suite B Cryptographic Suites for IPsec implemented in the product or service.

The use of this product or service is subject to the reasonable, non-discriminatory terms in the Intellectual Property Rights (IPR) Disclosure of Certicom Corp. at the IETF for Algorithms for Internet Key Exchange version 1 (IKEv1) implemented in the product or service.

Index

Numerics

- 250-sheet tray
 - installing 26
- 550-sheet tray
 - installing 26

Symbols

- [x]-page jam, clear manual feeder.
[25y.xx] 191
- [x]-page jam, clear standard bin.
[20y.xx] 188
- [x]-page jam, open front door.
[20y.xx] 184
- [x]-page jam, open rear door.
[20y.xx] 187
- [x]-page jam, open tray [x].
[24y.xx] 190
- [x]-page jam, remove tray 1 to clear duplex. [23y.xx] 189

A

- accessing the controller board 12, 40, 74
- accessing the Embedded Web Server 77
- Active NIC menu 132
- adjusting brightness
 - Embedded Web Server 108
 - printer control panel 108
- adjusting display brightness 108
- adjusting printer display brightness 65
- adjusting Sleep mode 62, 106
- adjusting toner darkness 52, 92
- administrator settings
 - Embedded Web Server 58, 101
- AppleTalk menu 137
- applications
 - home screen 78
- attaching cables 39, 72
- available internal options 12
- avoiding jams 118
- avoiding paper jams 181

B

- Background and Idle Screen
 - using 78

buttons, touch screen

- using 71

C

- cables
 - Ethernet 39, 72
 - parallel 39
 - USB 39, 72
- canceling
 - print job, from computer 57, 97
- canceling a print job
 - from a computer 57, 97
 - from the printer control panel 57, 97
- cannot open Embedded Web Server 236
- card stock
 - loading, multipurpose feeder 46, 86
 - tips 114
- Cartridge low [88.xy] 193
- Cartridge nearly low [88.xy] 193
- Cartridge very low, [x] estimated pages remain [88.xy] 193
- Cartridge, imaging unit mismatch [41.xy] 193
- Change [paper source] to [custom string] load [paper orientation] 194
- Change [paper source] to [custom type name] load [orientation] 193
- Change [paper source] to [paper size] load [orientation] 194
- Change [paper source] to [paper type] [paper size] load [orientation] 194
- checking an unresponsive printer 205
- checking status of parts and supplies 61, 104
- checking the status of parts and supplies 61, 104
- checking the virtual display
 - using the Embedded Web Server 58, 101
- cleaning
 - exterior of the printer 172
- cleaning the printer 172
- Close front door 194
- Complex page, some data may not have printed [39] 194
- confidential data
 - information on securing 67, 113
- confidential jobs
 - modifying print settings 59, 102
- confidential print jobs 55, 95
 - printing from a Macintosh computer 56, 95
 - printing from Windows 56, 95
- Confidential Print menu 143
- Configuration change, some held jobs were not restored [57] 194
- configuration information
 - wireless network 32
- configurations
 - printer 36, 68
- Configure MP menu 126
- configuring
 - multiple printers 59, 102
 - supply notifications, imaging unit 58, 101
 - supply notifications, maintenance kit 58, 101
 - supply notifications, toner cartridge 58, 101
- configuring port settings 99
- configuring supply notifications 58, 101
- configuring the Universal paper size settings 41, 80
- connecting to a wireless network
 - Push Button Configuration Method 34
 - Start PIN Method 34
- using the Embedded Web Server 34
- using wireless setup wizard 33
- conservation settings
 - brightness, adjusting 65, 108
 - conserving supplies 170
 - Eco-Mode 61, 104
 - Hibernate mode 63, 106
 - Hibernate Timeout 64, 107
 - Quiet Mode 105
 - Quiet mode 62
 - Schedule Power Modes 65, 108
 - Sleep Mode 106

Sleep mode 62
conserving supplies 170
contacting customer support 238
control panel, printer 37
 indicator light 38, 69
 Sleep button light 38, 69
controller board
 accessing 12, 40, 74
creating custom name
 paper type 90
creating the printer control panel
PIN 60, 103
Custom Names menu 130
custom paper type
 assigning 51
custom paper type name
 assigning 90
 creating 51
Custom Type [x]
 assigning a paper type 51
 creating custom name 90
Custom Type [x] name
 creating 51
Custom Types menu 130

D

Default Source menu 123
Defective flash detected [51] 195
device and network settings
 erasing 67
device and network settings information
 erasing 111
directory list
 printing 57, 96
disk wiping 111
display troubleshooting
 printer display is blank 207
display, control panel 37
display, printer control panel
 adjusting brightness 65, 108
disposing of printer hard disk 109
documents, printing
 from Macintosh 52, 91
 from Windows 52, 91

E

Eco-Mode setting 61, 104
Eco-Settings
 about 79

embedded solutions
 erasing 67
embedded solutions information
 erasing 111
Embedded Web Server
 accessing 77
 adjusting brightness 65
 administrator settings 58, 101
 checking the status of
 parts 61, 104
 checking the status of
 supplies 61, 104
 copying settings to other
 printers 59, 102
 modifying confidential print
 settings 59, 102
 networking settings 58, 101
 problem accessing 236
Embedded Web Server
Administrator's Guide

Error reading USB drive. Remove
USB. 195
Error reading USB hub. Remove
hub. 195
Ethernet network
 preparing to set up for Ethernet
 printing 30
Ethernet network setup
 using Macintosh 30
 using Windows 30
Ethernet networking
 Macintosh 30
 Windows 30
Ethernet port 39, 72
Ethernet setup
 preparing for an 30
exporting a configuration
 using the Embedded Web
 Server 79
exterior of the printer
 cleaning 172

F

factory defaults
 restoring 109
factory defaults, restoring 65
FCC notices 241, 246
finding more information about the
printer 8
finding printer IP address 77
Finishing menu 159
firmware card 12
flash drive
 printing from 53, 93
Flash Drive menu 155
flash drives
 supported file types 54, 94
font sample list
 printing 56, 96
Forms and Favorites
 setting up 78

G

General Settings menu 147
green settings
 Eco-Mode 61, 104
 Hibernate mode 63, 106
 Hibernate Timeout 64, 107
 Quiet Mode 105
 Quiet mode 62
 Schedule Power Modes 65, 108

H

held jobs 55, 95
printing from a Macintosh computer 56, 95
printing from Windows 56, 95
Help menu 168
Hibernate mode
using 63, 106
Hibernate Timeout
setting 64, 107
hiding icons on the home screen 77
home screen
buttons, understanding 70
customizing 77
hiding icons 77
showing icons 77
home screen applications
configuring 78
finding information 78
home screen buttons
understanding 70
home screen buttons and icons
description 69
HTML menu 167

I

icons on the home screen
hiding 77
showing 77
Image menu 168
imaging unit
ordering 174
replacing 177
Imaging unit low [84.xy] 195
Imaging unit nearly low [84.xy] 195
Imaging unit very low, [x] estimated
pages remain [84.xy] 195
importing a configuration
using the Embedded Web Server 79
Incorrect paper size, open [paper source] [34] 196
indicator light 37
individual settings
erasing 67
individual settings information
erasing 111
Insert Tray [x] 196
installing
Internal Solutions Port 16
installing an optional card 12

installing printer hard disk 23
installing printer on a network
Ethernet networking 30
installing printer software
adding options 29
installing printer software (Windows) 28
installing the 250-sheet tray 26
installing the 550-sheet tray 26
Insufficient memory for Flash Memory Defragment operation [37] 196
Insufficient memory to collate job [37] 196
Insufficient memory to support Resource Save feature [35] 196
Insufficient memory, some Held Jobs were deleted [37] 196
Insufficient memory, some held jobs will not be restored [37] 197
internal options 12
Internal Solutions Port
changing port settings 99
installing 16
troubleshooting 209
IP address of computer
finding 76
IP address, printer
finding 77
IPv6 menu 136

J

jams
accessing 182
avoiding 181
understanding messages 182
jams, clearing
in duplex area 189
in front door 184
in manual feeder 191
in rear door 187
in standard bin 188
in tray [x] 190
Job Accounting menu 161

L

labels, paper
tips on using 115
letterhead
loading, multipurpose feeder 46, 86

tips on using 115
light, indicator 37
linking trays 50, 89, 90
Load [paper source] with [custom string] [paper orientation] 197
Load [paper source] with [custom type name] [paper orientation] 197
Load [paper source] with [paper size] [paper orientation] 197
Load [paper source] with [paper type] [paper size] [paper orientation] 198
Load manual feeder with [custom string] [paper orientation] 198
Load manual feeder with [custom type name] [paper orientation] 198
Load manual feeder with [paper size] [paper orientation] 198
Load manual feeder with [paper type] [paper size] [paper orientation] 199
loading
multipurpose feeder 46, 86
trays 42, 81
loading the optional tray 42, 81
loading the standard tray 42, 81
lock, security 66, 109

M

maintenance kit
ordering 174
Maintenance kit low [80.xy] 199
Maintenance kit nearly low [80.xy] 199
Maintenance kit very low, [x] estimated pages remain [80.xy] 199
memory
types installed on printer 66, 109
memory card 12
installing 14
memory card connector
location 74
Memory full [38] 199
menu settings
loading on multiple printers 59, 102
menu settings page
printing 60, 103
menus
Active NIC 132
AppleTalk 137

Confidential Print 143

Configure MP 126

Custom Names 130

Custom Types 130

Default Source 123

Erase Temporary Data Files 145

Finishing 159

Flash Drive 155

General Settings 147

Help 168

HTML 167

Image 168

IPv6 136

Job Accounting 161

list of 122

Miscellaneous 143

Network [x] 132

Network Card 134

Paper Loading 129

Paper Size/Type 123

Paper Texture 126

Paper Weight 128

Parallel [x] 139

PCL Emul 164

PDF 163

PostScript 164

Quality 160

Reports 131, 134

Security Audit Log 144

Set Date and Time 145

Setup 157

SMTP Setup menu 142

Standard Network 132

Standard USB 138

Substitute Size 126

TCP/IP 135

Universal Setup 131

Utilities 162

Wireless 137

XPS 163

Miscellaneous menu 143

mobile device

printing from 55, 94

moving the printer 10, 11, 179, 180

multipurpose feeder

loading 46, 86

N

Network [x] menu 132

Network [x] software error

[54] 200

Network Card menu 134

network settings

Embedded Web Server 58, 101

network setup page

printing 61, 104

Networking Guide

where to find 58, 101

noise emission levels 242

Non-Lexmark [supply type], see

User's Guide [33.xy] 200

non-volatile memory 66, 109

erasing 67, 111

Not enough free space in flash

memory for resources [52] 200

notices 240, 241, 242, 243, 244,

245, 246, 247, 248

number of remaining pages

estimate 175

O

optional card

installing 12

optional tray

loading 42, 81

options

250-sheet tray, installing 26

550-sheet tray, installing 26

firmware cards 12

Internal Solutions Port 16

memory card 14

memory cards 12

printer hard disk, installing 23

printer hard disk, removing 25

updating in printer driver 29

ordering

imaging unit 174

maintenance kit 174

ordering supplies

toner cartridges 173

P

paper

characteristics 116

letterhead 117

loading, multipurpose

feeder 46, 86

preprinted forms 117

recycled 118

selecting 117

setting size 41

setting type 41

storing 118

unacceptable 117

Universal size setting 41, 80

using recycled 170

paper feed troubleshooting

message remains after jam is

cleared 211

paper jams

avoiding 181

paper jams, clearing

in duplex area 189

in front door 184

in manual feeder 191

in rear door 187

in standard bin 188

in tray [x] 190

paper labels

loading, multipurpose

feeder 46, 86

Paper Loading menu 129

paper messages

[x]-page jam, remove tray 1 to
clear duplex. [23y.xx] 189

paper size

setting 80

Paper Size/Type menu 123

paper sizes

supported by the printer 119

paper stop, using 41, 81

Paper Texture menu 126

paper type

setting 80

paper types

duplex support 120

supported by printer 120

where to load 120

Paper Weight menu 128

Parallel [x] menu 139

parallel port 39

parts

checking status 61, 104

checking, from printer control

panel 104

checking, using the Embedded

Web Server 61, 104

using genuine Lexmark 172

parts and supplies, status of

checking, on printer control

panel 61

PCL Emul menu 164

PDF menu 163

port settings

configuring 99

- PostScript menu 164
preparing to set up the printer on an Ethernet network 30
print irregularities 223
print job
 canceling from the printer control panel 57
 canceling, from computer 57, 97
print quality troubleshooting
 blank pages 227
 characters have jagged edges 218
 clipped pages or images 218
 gray background on prints 220
 horizontal voids appear on prints 232
 print irregularities 223
 print is too dark 224
 print is too light 226
 printer is printing solid black pages 229
 repeating print defects appear on prints 224
 shadow images appear on prints 219
 skewed print 228
 streaked horizontal lines appear on prints 230
 streaked vertical lines 231
 toner fog or background shading 234
 toner rubs off 234
 toner specks appear on prints 234
 transparency print quality is poor 229
 uneven print density 235
 white streaks 233
print troubleshooting
 error reading flash drive 212
 held jobs do not print 214
 incorrect characters print 216
 incorrect margins on prints 221
 jammed pages are not reprinted 211
 job prints from wrong tray 215
 job prints on wrong paper 215
 jobs do not print 212
 Large jobs do not collate 217
 multiple-language PDF files do not print 211
 paper curl 222
 paper frequently jams 210
 print job takes longer than expected 215
 tray linking does not work 216
 unexpected page breaks occur 217
printer
 basic model 36
 configurations 68
 minimum clearances 10, 11
 moving 10, 11, 179, 180
 selecting a location 10, 11
 shipping 180
printer configurations 36
 basic model 68
 configured model 68
printer control panel 37, 69
 adjusting brightness 65
 factory defaults, restoring 65, 109
 indicator light 38, 69
 Sleep button light 38, 69
 using 37
printer control panel PIN
 creating 60, 103
printer control panel, virtual display
 using the Embedded Web Server 58, 101
Printer had to restart. Last job may be incomplete. 201
printer hard disk
 disposing of 109
 encrypting 112
 installing 23
 removing 25
 wiping 111
printer hard disk encryption 112
printer hard disk memory
 erasing 111
printer information
 where to find 8
printer IP address
 finding 77
printer is printing blank pages 227
printer messages
 [x]-page jam, clear manual feeder. [25y.xx] 191
 [x]-page jam, clear standard bin. [20y.xx] 188
 [x]-page jam, open front door. [20y.xx] 184
 [x]-page jam, open rear door. [20y.xx] 187
[x]-page jam, open tray [x]. [24y.xx] 190
Cartridge low [88.xy] 193
Cartridge nearly low [88.xy] 193
Cartridge very low, [x] estimated pages remain [88.xy] 193
Cartridge, imaging unit mismatch [41.xy] 193
Change [paper source] to [custom string] load [paper orientation] 194
Change [paper source] to [custom type name] load [orientation] 193
Change [paper source] to [paper size] load [orientation] 194
Change [paper source] to [paper type] [paper size] load [orientation] 194
Close front door 194
Complex page, some data may not have printed [39] 194
Configuration change, some held jobs were not restored [57] 194
Defective flash detected [51] 195
Error reading USB drive. Remove USB. 195
Error reading USB hub. Remove hub. 195
Imaging unit low [84.xy] 195
Imaging unit nearly low [84.xy] 195
Imaging unit very low, [x] estimated pages remain [84.xy] 195
Incorrect paper size, open [paper source] [34] 196
Insert Tray [x] 196
Insufficient memory for Flash Memory Defragment operation [37] 196
Insufficient memory to collate job [37] 196
Insufficient memory to support Resource Save feature [35] 196
Insufficient memory, some Held Jobs were deleted [37] 196
Insufficient memory, some held jobs will not be restored [37] 197
Load [paper source] with [custom string] [paper orientation] 197

Load [paper source] with [custom type name] [paper orientation] 197
Load [paper source] with [paper size] [paper orientation] 197
Load [paper source] with [paper type] [paper size] [paper orientation] 198
Load manual feeder with [custom string] [paper orientation] 198
Load manual feeder with [custom type name] [paper orientation] 198
Load manual feeder with [paper size] [paper orientation] 198
Load manual feeder with [paper type] [paper size] [paper orientation] 199
Maintenance kit low [80.xy] 199
Maintenance kit nearly low [80.xy] 199
Maintenance kit very low, [x] estimated pages remain [80.xy] 199
Memory full [38] 199
Network [x] software error [54] 200
Non-Lexmark [supply type], see User's Guide [33.xy] 200
Not enough free space in flash memory for resources [52] 200
Printer had to restart. Last job may be incomplete. 201
Reinstall missing or unresponsive cartridge [31.xy] 201
Reinstall missing or unresponsive imaging unit [31.xy] 201
Remove paper from standard output bin 201
Replace cartridge, 0 estimated pages remain [88.xy] 201
Replace cartridge, printer region mismatch [42.xy] 201
Replace imaging unit, 0 estimated pages remain [84.xy] 202
Replace maintenance kit, 0 estimated pages remain [80.xy] 202
Replace unsupported cartridge [32.xy] 202
Replace unsupported imaging unit [32.xy] 202

Serial option [x] error [54] 203
SMTP server not set up. Contact system administrator. 203, 204
Standard network software error [54] 203
Standard parallel port disabled [56] 203
Standard USB port disabled [56] 203
Too many flash options installed [58] 204
Too many trays attached [58] 204
Unformatted flash detected [53] 204
Unsupported option in slot [x] [55] 204
Unsupported USB hub, please remove 195
printer options troubleshooting internal option is not detected 207
Internal Solutions Port 209
tray problems 208
USB/parallel interface card 209
printer problems, solving basic 205
printer security information on 67, 113
printer setup verifying 35
printer software, installing (Windows) 28
printing canceling, from the printer control panel 97
directory list 57, 96
font sample list 56, 96
forms 91
from a mobile device 55, 94
from flash drive 53, 93
from Macintosh 52, 91
from Windows 52, 91
menu settings page 60, 103
network setup page 61, 104
printing a directory list 96
printing a document 52, 91
printing a font sample list 96
printing a menu settings page 103
printing a network setup page 61, 104

printing confidential and other held jobs from a Macintosh computer 56, 95 from Windows 56, 95
printing forms 91
printing from a flash drive 53, 93
printing from a mobile device 55, 94
publications where to find 8

Q

Quality menu 160
Quiet Mode 105
Quiet mode 62

R

recycled paper using 118, 170
recycling Lexmark packaging 171
Lexmark products 171
toner cartridges 171
reducing noise 62, 105
Reinstall missing or unresponsive cartridge [31.xy] 201
Reinstall missing or unresponsive imaging unit [31.xy] 201
Remote Operator Panel setting up 79
Remove paper from standard output bin 201
removing printer hard disk 25
repeat print jobs 55, 95
printing from a Macintosh computer 56, 95
printing from Windows 56, 95
repeating print defects appear on prints 224
Replace cartridge, 0 estimated pages remain [88.xy] 201
Replace cartridge, printer region mismatch [42.xy] 201
Replace imaging unit, 0 estimated pages remain [84.xy] 202
Replace maintenance kit, 0 estimated pages remain [80.xy] 202
Replace unsupported cartridge [32.xy] 202

Replace unsupported imaging unit

[32.xy] 202

replacing

imaging unit 177

toner cartridge 175

Reports menu 131, 134

reserve print jobs

printing from a Macintosh

computer 56, 95

printing from Windows 56, 95

restoring factory default

settings 109

S

safety information 6, 7, 242

Schedule Power Modes

using 65, 108

security

modifying confidential print settings 59, 102

Security Audit Log menu 144

security lock 66, 109

security settings

erasing 67

security settings information erasing 111

security Web page

where to find 67, 113

selecting a location for the

printer 10, 11

selecting paper 117

Serial option [x] error [54] 203

serial printing

setting up 97

Set Date and Time menu 145

setting

paper size 41, 80

paper type 41, 80

TCP/IP address 135

setting Hibernate Timeout 64, 107

setting up serial printing 97

setting up the printer

on an Ethernet network

(Macintosh only) 30

on an Ethernet network (Windows only) 30

Setup menu 157

shipping the printer 180

showing icons on the home

screen 77

Sleep Mode

adjusting 106

Sleep mode

adjusting 62

SMTP server not set up. Contact system administrator. 203, 204

SMTP Setup menu 142

standard bin, using 41, 81

Standard Network menu 132

Standard network software error

[54] 203

Standard parallel port disabled

[56] 203

standard tray

loading 42, 81

Standard USB menu 138

Standard USB port disabled

[56] 203

statement of volatility 66, 109

status of parts

checking 104

status of parts and supplies

checking 61

status of supplies

checking 104

storing

paper 118

supplies 175

storing print jobs 55, 95

streaked horizontal lines appear on prints 230

streaked vertical lines appear on prints 231

streaks appear 233

Substitute Size menu 126

supplies

checking status 61, 104

checking, from printer control panel 104

checking, using the Embedded

Web Server 61, 104

conserving 170

storing 175

using genuine Lexmark 172

using recycled paper 170

supplies, ordering

imaging unit 174

maintenance kit 174

toner cartridges 173

supply notifications

configuring 58, 101

supported flash drives 54, 94

supported paper sizes 119

supported paper types and

weights 120

T

TCP/IP menu 135

tips

card stock 114

letterhead 115

on using envelopes 114

on using labels 115

transparencies 115

tips on using envelopes 114

toner cartridge

replacing 175

toner cartridges

ordering 173

recycling 171

toner darkness

adjusting 52, 92

Too many flash options installed

[58] 204

Too many trays attached [58] 204

touch screen

buttons, using 71

transparencies

loading, multipurpose

feeder 46, 86

tips 115

trays

linking 50, 89, 90

loading 42, 81

unlinking 50, 89, 90

troubleshooting

an application error has

occurred 236

cannot open Embedded Web

Server 236

checking an unresponsive

printer 205

contacting customer support 238

solving basic printer

problems 205

troubleshooting, display

printer display is blank 207

troubleshooting, paper feed

message remains after jam is

cleared 211

troubleshooting, print

error reading flash drive 212

held jobs do not print 214

incorrect characters print 216

incorrect margins on prints 221

- jammed pages are not reprinted 211
job prints from wrong tray 215
job prints on wrong paper 215
jobs do not print 212
Large jobs do not collate 217
multiple-language PDF files do not print 211
paper curl 222
paper frequently jams 210
print job takes longer than expected 215
tray linking does not work 216
unexpected page breaks occur 217
troubleshooting, print quality
blank pages 227
characters have jagged edges 218
clipped pages or images 218
gray background on prints 220
horizontal voids appear on prints 232
print irregularities 223
print is too dark 224
print is too light 226
printer is printing solid black pages 229
repeating print defects appear on prints 224
shadow images appear on prints 219
skewed print 228
streaked horizontal lines appear on prints 230
streaked vertical lines 231
toner fog or background shading 234
toner rubs off 234
toner specks appear on prints 234
transparency print quality is poor 229
uneven print density 235
white streaks on a page 233
troubleshooting, printer options
internal option is not detected 207
Internal Solutions Port 209
tray problems 208
USB/parallel interface card 209
- U**
unacceptable paper 117
- understanding the home screen 70
understanding the home screen
buttons and icons 69
uneven print density 235
Unformatted flash detected [53] 204
Universal paper size settings configuring 41, 80
Universal Setup menu 131
unlinking trays 50, 89, 90
Unsupported option in slot [x] [55] 204
Unsupported USB hub, please remove 195
updating options in printer driver 29
USB port 39, 72
USB/parallel interface card troubleshooting 209
User's Guide using 8
using Forms and Favorites 91
using Hibernate mode 63, 106
using recycled paper 170
using Schedule Power Modes 65, 108
using the printer control panel 37, 69
using the touch-screen buttons 71
Utilities menu 162
- V**
verify print jobs 55, 95
printing from a Macintosh computer 56, 95
printing from Windows 56, 95
verifying printer setup 35
vertical voids appear 233
virtual display
checking, using Embedded Web Server 58, 101
voids appear 233
volatile memory 66, 109
erasing 67, 110
volatility
statement of 66, 109
- W**
wiping the printer hard disk 111
Wireless menu 137
- wireless network configuration information 32
wireless network setup using the Embedded Web Serve 34
wireless networking
Push Button Configuration Method 34
Start PIN Method 34
wireless setup wizard using 33
- X**
XPS menu 163